



Fourth issue]

# AREA AND YIELD

OF

RICE

OILSEEDS

WHEAT

JUTE

COTTON

INDIGO

SUGARCANE

FOR VARIOUS PERIODS FROM

1891-92 TO 1901-02

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## NOTE

THE Government of India issue periodically during the year estimates of the yield of certain crops compiled from local statements, in the Statistical Department.

It has been the practice to issue a preliminary forecast, a second estimate, and a third (and final) estimate, fuller and more precise than the first two. The summaries in the present publication are a condensation of the final estimates, presenting in a connected and convenient form a record of the conditions of the season as reported at the time from each province.

Following the summaries is a set of tables, abstracted from the tables appended to the final estimates, in which are stated the area sown and the estimated yield of the crops. The figures, as is well known, are not complete. Those received from Madras, for instance, do not include the *zamindari* area, that is, the area of large proprietary estates, which constitutes a third of the Presidency, and the figures received from the Native States are also generally very defective. It should be noted too that reports are received only from provinces in which the crop is extensively grown; for instance, estimates of the yield of rice are received only from Burma, Bengal, and Madras.

July 12, 1902

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**SUMMARY OF THE CONDITIONS OF THE SEASON FROM 1891-92  
To 1901-02**

**RICE**

In Bengal the rainfall was unusually deficient in the period from July to October, and widespread injury was done to the winter crop. Deficient rain during the early part of the season also affected the autumn crop. 1891-92

In Madras too the season was adverse, the rain failing over large areas.

In Burma conditions were satisfactory.

In Bengal the autumn rainfall was general and favourable, inducing extended cultivation. In Madras also the season was favourable and the condition of the crop good until November when the rains failed in places. 1892-93

In Burma conditions were good everywhere.

Throughout Bengal there was abnormally heavy rain, with destructive floods in east Bengal and parts of north Bihar; but on the whole the season was very favourable for winter and not unfavourable for autumn rice. 1893-94

In Madras the season was generally favourable for sowings, and though the rains of the autumn and winter injured the crop in some places, the yield was three-fourths of a full average.

In Burma the season was favourable.

Over the greater part of Bengal the late rains were favourable to winter rice which gave a better crop than had been known for some years. For the autumn rice the season was in the main favourable. 1894-95

In Madras the south-west monsoon was late and the rainfall generally partial and insufficient, but in the Northern, Central, and Deccan districts, and in Tanjore and Trichinopoly, the crop was on the whole good. Elsewhere the unfavourable character of the north-east monsoon affected the crop.

In Burma the crop suffered somewhat from insufficient rain.

The season in Bengal up to September was on the whole favourable, though rain was deficient in some districts. The deficiency was marked in September and October over large areas, and there was practically no rain in November. 1895-96

In Madras the crop generally was fair, though in some places in consequence of the failure of the early rains, the yield was small. The crop was also affected in Godavari and Kistna by floods.

In Burma the late rains were unequally distributed, but the yield, owing to the larger area sown, was satisfactory.

In Bengal the season was very unfavourable, the early withdrawal of the monsoon seriously affecting the crop. A little good was done by rain in February, but there was an extensive failure of the crop, with famine, over large areas, especially in Bihar. 1896-97

In Madras the crop was generally reported to vary from fair to good, except in Ganjam and Vizagapatam where large areas completely failed, and in the Deccan districts where there was only a half crop. In these tracts famine prevailed. Conditions were better in the southern districts.

In Burma the season was favourable and the crop excellent.

In Bengal the anxiety of the people to augment their reduced stocks of food induced them to substitute autumn rice over extensive areas for non-edible crops; and a good season for this crop was followed by a still better one for the great winter rice crop. 1897-98

In Madras an extended area was sown, the increase being attributed to the heavy rainfall of the south-west monsoon. The conditions were on the whole sufficiently good, though qualified by the failure of the north-east monsoon, to produce a fair yield.

In Burma the conditions of the season were uniformly favourable.



## RICE

### 1898-99

In Bengal the season was in the main favourable, and an extended area was placed under both autumn and winter rice. Though injury was done by floods in September in north Bihar it was confined to comparatively small areas, and the heavy rain benefited the crop beyond the submerged tracts and on high lands.

In Madras the rainfall was deficient in the northern districts and the Deccan, and excessive in the southern part of the Carnatic.

In Burma some injury was done to the crop by the failure of the rains towards the end of the season.

### 1899-1900

In Bengal the season was generally unfavourable to the autumn rice, the rainfall being excessive in June, July, and August, and below the average in the following months. In some districts also the autumn rice was injured by insects. The season was not, however, so unfavourable for the winter rice crop, which is far more important than the other.

In Madras heavy rain in September and October enabled the cultivators to plant rice freely, but the season did not continue to be favourable for a good yield, especially in the Deccan, Carnatic, and southern districts.

In Burma the season was good and the crop large.

### 1900-01

In Bengal the season was on the whole not favourable for autumn rice, the rainfall being on the whole deficient and capriciously distributed. For the winter rice also the season was not favourable, and the absence of rain at the time for sowing and transplanting led to a decline in the area sown.

In Madras the season was not unfavourable and the crop was generally satisfactory.

In Burma the crop was grown in normal conditions.

### 1901-02

In Bengal the season was not entirely favourable for the autumn rice. From April to August the rainfall was unevenly distributed, and in July it was deficient almost everywhere. General and copious rain fell in September, but in October the rains ceased abruptly. For the winter rice the season was more unfavourable. The abrupt termination of the monsoon in September, for there was very little general rain in October, did great injury to the crop, and in all the Bihar districts, where the rainfall in June was also very deficient, it was a failure. The weather was seasonable during transplantation which led to an increase in the area sown.

In Madras the season was not so favourable for early planting as in 1900, but owing to good supplies of water from the irrigation works and generally good rain in August and September an area about equal to the average yielded a crop rather more than the average of recent years.

In Burma conditions were favourable. Rain fell at the end of the first week in February, but the crop, which was greatly in excess of the average, was but very slightly injured.

## WHEAT

### 1891-92

In the Panjab the rainfall in September and October was generally very favourable, but the subsequent break and the failure of the winter rains interfered with the full growth of the plant on unirrigated land. Abnormally hot weather in March, as well as cold winds and frosts in February, injured the crop.

In the United Provinces of Agra and Oudh heavy rain fell in August and September and greatly interfered with the preparation of the soil, but the moisture helped successful germination. The winter rains were delayed, but rain in February benefited the crop. Hot winds in March and April damaged the grain, especially in the western districts.

In Bengal conditions were generally unfavourable. Abnormally dry weather from October materially interfered with sowing operations and affected germination and growth, and the crop was injured by early west winds in some parts of Bihar and north and east Bengal.

In the Central Provinces the season was abnormally dry, no rain falling from October to January. The area sown was therefore restricted and the grain dried prematurely.

In Bombay the rainfall was good in Gujarat and Khandesh, but deficient in the Deccan and Karnatak. The crop suffered from adverse winds and absence of moisture in Khandesh, while elsewhere in the Deccan both unirrigated and irrigated crops suffered from the absence of the late rains. In Sind conditions were less unfavourable, but frost and westerly winds affected the crop in places.

WHEAT

In Berar the monsoon was characterised by excessive rain at sowing time, and the season was unfavourable, the north-east monsoon ceasing too early. The crop suffered from lack of moisture.

1892-93

In the Panjab the season was favourable, and continued rains in the winter months encouraged extensive sowings and improved prospects.

In the United Provinces of Agra and Oudh the monsoon rain, scanty in the beginning, was excessive and continuous in August and September, but fine weather then supervened and was favourable to germination. The winter rains benefited the crop, especially on unirrigated land.

In Bengal the season was unfavourable owing to deficient rain at sowing time, but the winter rains were beneficial except in north Bihar, though excessive rain in February and March injured the crop.

In the Central Provinces rain in October was favourable on the whole, though excessive in Nagpur. The crop was greatly injured by rust.

In Bombay the late rain was sufficient in Gujarat, conditions were favourable to extended cultivation in the Deccan and the Karnatak, and seasonable rain and sufficient inundation encouraged sowings in Sind.

In Berar the season was favourable. The monsoon arrived late and this fact encouraged sowings of wheat, though excessive rain in October interrupted sowings in places. The crop suffered from blight in January and from stormy weather in March.

1893-94

In the Panjab the season was very favourable. The winter rains were copious and most seasonable, though the crop was injured by rust in places, especially on low-lying lands.

In the United Provinces of Agra and Oudh the monsoon set in unusually early and rain was excessive and continuous from July to October. Dry weather continued to the end of December, and rain in January and February was generally beneficial, but the crop was greatly injured by high winds and rust.

In Bengal also the early rains were excessive, but prolonged drought afterwards, and the absence of the winter rains until February, seriously affected the crop. Prospects were further impaired by wet and cloudy weather late in the season.

In the Central Provinces sowings in Nagpur were greatly restricted in consequence of the losses from rust in 1892-93.

In Bombay the monsoon rainfall was excessive for kharif sowings and the area left unsown was utilised for wheat in the eastern Deccan. Sufficient late rain encouraged sowings in the Karnatak, but elsewhere wheat was replaced by cotton and oilseeds. In Sind the absence of rain and consequent insufficient inundation restricted sowings.

In Berar the season was good, though it varied considerably in different districts, the rainfall in some being excessive.

1894-95

In the Panjab the monsoon rain was excessive and floods ensued in the central districts, but the monsoon ceased early, and the winter rain was sufficient. The harvest was excellent.

In the United Provinces of Agra and Oudh the continuance of excessively heavy rain, especially in the central and eastern districts, caused a slight contraction in the area sown. Wet and cloudy weather and strong winds considerably affected the crop and shrivelled the grain.

In Bengal, in consequence of the late arrival of the monsoon rain, the area sown was restricted, and the crop was seriously affected by prolonged drought from November to the middle of January.

In the Central Provinces the area was greatly contracted, the crop suffered severely from heavy rain at the time of sowing, and excessive moisture favoured the spread of fungoid disease in many districts.

In Bombay and Sind the season was on the whole favourable, and the yield satisfactory, although the crop suffered from cloudy weather, rust, and frost.

In Berar, owing to heavy rain at the time of sowing, the season was not so favourable, and rust was common.

In the Nizam's Territory heavy rain late in the season reduced the yield.

1895-96

In the Panjab the monsoon rains were scanty and ceased early, the winter rains were a failure, and disaster was averted only by a general fall in the end of January and the beginning of February. At sowing time no useful rain fell in any district, and the area sown was greatly restricted in unirrigated tracts dependent entirely on the rainfall; in irrigated tracts, however, there was a considerable increase. The season continued very unfavourable for land dependent on rain.

In the United Provinces of Agra and Oudh the character of the season was almost exactly like that in the Panjab, but the rain of January and February did not extend beyond Meerut and Rohilkhand and part of Agra; nor was it sufficient where it fell to remove the effect of the prolonged drought over any great area.

WHEAT

In Bengal also the autumn rains ceased early and the winter rains failed.

In the Central Provinces and Berar the monsoon rains came to an early and abrupt termination as elsewhere. The conditions were unfavourable at sowing time and became worse later, with the result that a deficient crop was taken from a contracted area.

In Bombay and Sind the season was on the whole unfavourable, owing generally to the causes which affected the other provinces. The area and yield were both very unsatisfactory, the yield in most places being only sufficient for local consumption.

1896-97

In the Panjab the monsoon rains were deficient, and sowings were restricted on unirrigated and stimulated on irrigated land. Fairly good and timely rain in November, December, and January permitted of late sowing; and copious and well distributed rain in February, March, and April, which in an ordinary year would have been injurious, was beneficial to the crop.

In the United Provinces of Agra and Oudh the autumn rain was very irregular and scanty, and greatly interfered with the preparation of the land. The winter rains were generally timely and well distributed, and improved prospects; but towards the end of February strong warm west winds did considerable damage. The area sown was much less than the average, but where irrigated in time the crop was good.

In Bengal the season was very unfavourable until the end of November. Rain in December, January, and February improved the crop, but some injury was done to wheat lying on the threshing-floors by rain in March.

In the Central Provinces the winter rains were favourable except in four or five districts.

In Bombay, owing chiefly to the general failure of the late rains, sowings were greatly restricted.

In Berar there was practically no rain at sowing time. Large tracts reserved for wheat remained unsown, much of the grain that was sown failed to germinate, the area reported under wheat was hardly more than half that in 1895-96, and the crop was almost a general failure.

In Rajputana the area sown was reduced, partly by reason of deficient rainfall at sowing time and partly through the substitution of linseed and gram for wheat in consequence of successive bad harvests of wheat.

In the Nizam's Territory the season was almost equally unfavourable.

1897-98

In the Panjab the late autumn rains were sufficient and well distributed. Rain in December benefited the standing crops and encouraged further sowings, and abundant rain in February after a prolonged drought was particularly beneficial. Subsequent conditions were favourable for harvesting operations, but storms in the second half of May damaged the grain on the threshing-floors.

In the United Provinces of Agra and Oudh the season was very favourable for sowing. Rain was general and well distributed except from November to January when irrigation was freely resorted to. The prolonged dry weather, and the strong wind which followed, affected the crop on unirrigated land, but it was considerably benefited by rain in February.

In Bengal the season was favourable; the autumn rain was copious and well distributed, and the crop germinated satisfactorily.

In the Central Provinces conditions were not as favourable as could have been desired, the autumn rain being insufficient for sowings. The crop suffered from insufficient moisture, but rain in February was beneficial to the late sown crop.

In Bombay the season was on the whole unfavourable, continuous and excessive rain at sowing time preventing full sowings in some places.

In Berar, too, the season was unfavourable, and the exhaustion of food-stocks during the famine induced sowings of jawar over much of the area usually reserved for wheat. No rain fell after the wheat was sown, but the unusually cold winter months and heavy dews benefited the crop.

In the Nizam's Territory the seasonal conditions were not so unfavourable as in the preceding year.

1898-99

In the Panjab conditions were on the whole not favourable. Deficient rain in August retarded sowings, there was but little rain in the succeeding months except in September, and the injury thus caused on lands not under irrigation was increased by a cold wave in January, and by rust and insects. Finally storms and high winds in May damaged the grain on the threshing-floors.

In the United Provinces of Agra and Oudh the season was on the whole very favourable. The monsoon was late and the rain irregular and unevenly distributed, but it gave abundant showers and sufficient moisture at sowing time. The winter rains were timely and sufficient.

In Bengal the season was uniformly favourable: the monsoon rain was heavy, and the early subsidence of the floods left a deposit of silt which was useful to cultivation. The winter rain also was of great benefit.

In the Central Provinces the seasonal conditions were not good. The heavy autumn rain interfered with the preparation of the soil, and the sudden cessation of the monsoon in the second half of September retarded sowings and produced defective germination. No rain

fell until February when it could not be expected to benefit a crop which had withered for want of moisture. Injury by hail and frost was also reported from some of the northern districts.

In Bombay the season was not on the whole favourable. The seasonable and sufficient rain which fell when the seed was being sown was interrupted later, and sowings were delayed, and it was not until September that rain fell again in quantity and improved prospects. The winter rains were also of benefit. On irrigated land conditions were fairly good. In Sind the season was decidedly bad, and sowings were restricted owing to insufficient inundation and scanty rainfall.

In Berar the season was not unfavourable at sowing time, but the sudden cessation of the monsoon towards the end of September and the failure of the winter rains left insufficient moisture for the full development of the plants, and the grain was ill-matured and small.

In the Nizam's Territory the rains which followed sowings were generally favourable, but when the plants were arriving at maturity rats infested the fields.

In the Panjab the monsoon rain to the end of September was partial and scanty, and in October, November, and December there was hardly any rain. About the third week of January, however, there was a general fall, and further rain in February, followed by showers in March and April, helped greatly in bringing the crop to maturity.

In the United Provinces of Agra and Oudh the conditions of the season approximated closely to those described as prevailing in the Panjab, and the wheat crop did very well.

In Bengal the want of rain at sowing time was felt in some districts, leading to a contraction in the area sown. On the whole, the season was not favourable to wheat: the rainfall was irregular and badly distributed, and in some districts the crop suffered also from hailstorms.

In the Central Provinces the monsoon began well, but its abrupt cessation at the close of September impeded successful sowings. The October rain, which determines the successful germination of the wheat crop, was entirely absent. There was none in November and December, and the few showers which fell at the close of January were too late to do any appreciable good. The soil was dry, the heat abnormal, and the usual dews did not fall.

In Bombay the season was so bad that in many places no sowings could be made. In September the rain was deficient, and it failed altogether in November and December. Of the total area sown in the British districts of the Presidency proper, about 55 per cent was reported to have failed altogether to produce any crop; most of the crop which was obtained was brought to maturity under irrigation, but even that crop was poor in consequence of the failure of water in wells and canals.

In Berar the season was disastrously bad. Even the best black soils failed to retain enough moisture for the successful growth of wheat, and in five out of the six districts sowings were not attempted on unirrigated land. Practically whatever was grown was irrigated from wells, and in many places the wells failed. The crop was an almost absolute failure.

In the Nizam's Territory the conditions and results were similar to those in Berar.

In the Panjab, after the heavy rains in August and September, large sowings were made on unirrigated lands, and the winter rains from December to March were so opportune throughout the province that in some districts the crops on wet lands were grown without the aid of irrigation. The crop was attacked in some districts by rust, favoured by the cloudy weather of February and March, and it had to contend in places with strong dry winds, hail, floods, excessive rain, and water-logging, as also, when the damage was caused on the threshing-floors, with untimely rain and storms. The yield was therefore smaller than might have been expected from the large area sown.

In the United Provinces of Agra and Oudh the autumn rains were so distributed as to permit of the adequate preparation of the fields for sowing. There was abundant moisture in the soil, and the crop was sown in good time. Until the close of January the prospects were very bright and a full normal yield was expected; but the prolongation of the winter rains with cloudy weather into February induced rust in almost every district.

In Bengal the continuance of the winter rains into February caused serious injury to the crop which was then ripe, and in Bihar, which had promised well, there was but a poor yield.

In the Central Provinces continuous rain in August and September interfered with the preparation of land, and the absence of the usual October showers was unfavourable to sowings in some districts. Germination was generally good, and, except in Nagpur, prospects were favourable until the continued cloudy weather and rain in January and February induced rust which caused serious injury.

In Bombay the rainfall in September and October was deficient in most places, and the land did not retain sufficient moisture to allow full sowings. Practically no rain fell in November and December, and the young crop withered. Irrigated crops fared better for a time, but they also suffered from scantiness of well water, while in places in Gujarāt rust, insects, and cloudy weather did harm. In the Deccan and Karuātāk the crop on unirrigated lands failed almost entirely, and the yield generally was unsatisfactory. In Sind alone was the season generally good.

1899-1900

1900-01

**WHEAT**  
**COTTON**

In Berar the monsoon rainfall was in excess of the normal, but the rains ceased suddenly at the end of September, and the land, which had become thoroughly parched during the famine year, did not retain sufficient moisture for the successful growth of wheat. No winter rain fell until the crop had come into ear, and it was then too late to be of much benefit.

In the Nizam's Territory sowings were not conducted in favourable conditions, the rain holding off, but some little compensation was obtained from the winter rains.

In Rajputana and Central India both area and yield were much below the average.

1901-02

In the Panjab the monsoon rainfall was less plentiful than usual and ceased early; the winter rains failed entirely. There were no late sowings, and the whole crop went practically without rain until the latter half of March when slight showers saved the withering crop from total destruction in some places. High winds and severe frost in February also proved detrimental to the standing crop, and the yield was decidedly below the average, even on irrigated lands. On unirrigated lands the failure was far more extensive. On lands irrigated by wells a considerable part of the crop was in some places used as fodder for cattle employed to work the wells. Some injury was done in places by hailstorms and by rust.

In the North-West Frontier Province the season throughout was one of unusual drought. From October to the end of February no rain fell and sowings on unirrigated lands were much reduced; the crop, where sown, in most cases withered away in March. A normal area was sown on irrigated lands which account for one-third of the crop of the season.

In the United Provinces of Agra and Oudh the monsoon of 1901 was abnormally delayed, and general rain did not set in until the 10th of July. The fall in July and August was well distributed and sufficient; but in the next two months it was deficient in the Meerut division and in parts of Agra and Rohilkhand where sowings in most places were effected with the aid of irrigation. November and the first three weeks of December were entirely rainless, and irrigation was resorted to whenever possible. The season was unusually dry and the unirrigated crop suffered generally from drought.

In Bengal the rainfall in Bihar was deficient in September and seriously in defect in October, and there was practically no rain until March, when it was too late to benefit the crop. There was a contraction in the area sown owing to drought at the sowing season in Bihar where the yield was much below the normal.

In the Central Provinces the season was abnormally dry, the October rain, on which the germination of wheat largely depends, being represented by only a few local showers, and there was no rain thereafter except in the first half of January in some places. Frost, rats, and insects also injured the crop.

In Bombay there was a contraction in the area sown owing to the deficiency of late rain. In Gujarat and North Deccan, the September rain was very deficient and sowings made little progress until after the October rains. No rain fell in November and December, and the crop suffered considerably not only from want of surface moisture, but also from the scanty supply in the wells. The surviving crop was further almost destroyed by a very severe plague of rats. In the South Deccan and the Karnatak, the September rain was generally sufficient but that in October was below the average and checked full sowings. Later rains were light and partial and the crop withered in many places, particularly in the eastern tracts where no rain fell and no irrigation was possible. Damage by insects and disease was also reported from a few places. The Sind crop was fairly good.

In Berar the monsoon rainfall was in excess of the normal, and although there were no winter rains, the moisture in the soil at sowing time was sufficient to promote the growth of the young plants and to bring the wheat satisfactorily into ear. At this stage, however, rats appeared in large numbers and did considerable injury, destroying in some localities almost the whole crop of the field in a single night.

In the Nizam's Territory conditions were at first somewhat favourable, but rats did considerable injury in places, and over a large area; the late rains were also not favourable.

In Rajputana both area and yield were much below the average. In Central India the area and yield were larger than the quinquennial average, but a little short of the decennial average.

**COTTON**

1891-92

In the Panjab the season was very unfavourable. The winter rains, which had been beneficial, were followed by a long drought, and the monsoon held off until the end of July, when rain was excessive. These conditions, and locusts, caused injury to both the early sowings and the late crop.

In the United Provinces of Agra and Oudh the weather conditions were the same as in the Panjab, with a worse result.

In the Central Provinces the season was also unfavourable; the monsoon broke exceedingly late, and then rain was heavy and continuous, injuring the crop on low land.

In Bombay the season was bad, rain was excessive in Gujarat, and late and deficient in the south Deccan and Karnatak. In Sind the overflow of the Indus was also late and irregular.

In Madras the rains failed almost entirely during the sowing season. In the southern districts extended sowings were made of the late crop, but excessive rain later in the season injured it.

In the Panjab the rains were again late and sowings were greatly restricted on unirrigated lands in the east and north-east of the province. An inadequate inundation had a similar effect on irrigated land in the west. The monsoon though late was copious, and floods injured the early sowings.

1892-93

Similar conditions prevailed in the United Provinces of Agra and Oudh.

In the Central Provinces excessive and injurious rain fell in September and October.

In Bombay the condition of the crop in Gujarat was greatly impaired by excessive rain in September. In the Karnatak a greater extent of land than usual was placed under food-grains as a result of the scarcity of the preceding seasons, and the area under cotton was in consequence smaller than the average. In the Deccan rain was exceptionally favourable for sowing and the area was increased. In Sind sowings were restricted owing to deficient water-supply and late inundation.

In Berar the season was generally good when sowings were made, but excessive rain in September and October injured the crop.

In Madras serious injury resulted from a very deficient rainfall in the north-east monsoon.

In the Panjab the season was favourable, though some injury was caused by heavy floods in July.

1893-94

In the United Provinces of Agra and Oudh continued heavy rain from July to October, and strong winds, retarded weeding operations and greatly injured the crop.

Excessive rain restricted sowings in Bengal, while in Orissa the same result was due to insufficient rain.

In Bombay rain in November affected the crop. The late crop, owing to favourable rain at sowing, covered a large area both in the Presidency and in Sind, but afterwards excessive rain reduced the yield.

In the Central Provinces and Berar excessive rain in November reduced the expectations of a full to a fair crop.

In Madras the season was favourable. The late crop covered a large area, but conditions after sowing were unfavourable by reason of excessive rain and cloudy weather.

In the Panjab the area under cotton, although, owing to rain and floods, less than originally anticipated, was extraordinarily large; the monsoon was capricious but on the whole very beneficial.

1894-95

In the United Provinces, on the other hand, the area was slightly below the average and heavy rain and stormy winds in October and November reduced the yield.

In Bengal owing to excessive rain the area of the early crop was below the average and the crop was affected by the late rains which interfered also with the sowing of the late crop. The weather which followed, however, was on the whole favourable.

In the Central Provinces and in Berar the rains were heavy and injured the standing crop.

In Bombay the rain was excessive in Gujarat and deficient in the Deccan; clouds in the north and disease in the south caused further injury.

In Madras there was a restriction in the area sown with the early and late crops due, in the northern and Deccan districts, to the fact that lands usually sown with cotton were placed under other crops, and in the southern districts mainly to the want of timely rains.

In the Panjab the season commenced well, but after July the rainfall was generally insufficient and untimely, with the result that on irrigated land the crop was good, but poor on land dependent entirely on rain.

1895-96

In the United Provinces of Agra and Oudh the rains were generally favourable to the crop, weeding operations were properly carried out, and an excellent crop was expected; but the rainfall at the end of the season proved very scanty, and insufficient moisture arrested the development of the plant. The yield, however, was on the whole good.

In Bengal the late sowings suffered from want of rain in October at sowing time, but the crop was benefited by favourable weather later.

In the Central Provinces the deficiency of rain in the later months of the monsoon favoured the crop which was particularly good.

In Berar also the scantier rainfall was beneficial to the crop.

In Bombay the absence of seasonable rain for sowing, and a long break in the rains in August, restricted sowings of early cotton. The area sown with the late crop was also below



COTTON

the average owing to deficiency of seasonable rain. The season was, however, on the whole better than in the preceding year. In Sind there was a deficiency of water.

In Madras the area sown was a little larger than the average owing to the favourable character of the season, but the yield was estimated to be below the average.

1896-97

In the Panjab no rain having fallen in April, sowings were greatly contracted on unirrigated land, though extensive sowings were made on irrigated areas. But the monsoon brought little rain and it ceased early; the harvest therefore depended on irrigation which was inadequate and the crop was bad.

In the United Provinces of Agra and Oudh there was sufficient rain and the crop was in good condition until the middle of August. Thereafter drought, with dry west winds, injured the crop, especially on unirrigated lands.

In Bengal the season was unfavourable, and the crop suffered from deficient rain and the early withdrawal of the monsoon.

In the Central Provinces the rainfall in September in many districts was very light and local. October was rainless, and the plants did not bloom freely.

In Berar there was seasonable rain at sowing time, and a large area was sown, but the yield was very poor owing to the failure of the monsoon after August.

In Bombay the season was on the whole unfavourable, large tracts remaining unsown owing to drought and deficient rain in places. The drought continued more or less from the middle of August and seriously affected the crop, except in Gujarat and Sind where the season was fairly good.

In Madras also the crop suffered greatly from deficient rainfall, and in places from excessive rain.

In the Nizam's Territory a restricted area was sown, and the crop was poor.

1897-98

In the Panjab sowings were restricted owing to insufficient rain and the replacement of cotton by food-grains. The yield on the restricted area was above the average.

In the United Provinces of Agra and Oudh the monsoon commenced late and the crop on low lands suffered from excessive rain; but on the whole the condition and quality of the crop were good.

In Bengal the season was on the whole favourable.

In the Central Provinces excessive and continuous rain in September and October injured the crop.

In Berar the season though a little late was on the whole favourable.

In Bombay the yield of both early and late crops was materially smaller than the average. The prospects of the crop were good until December, when it suffered from blight and locusts in many places. In Sind also the yield was comparatively small, the conditions of the season leaving much to be desired.

In Madras the rainfall was seasonable and sufficient, and an extended area was sown in the districts growing "northern" and "western" varieties, but the lateness of the monsoon contracted the area in places where Tinnevely and Salem cotton is grown. The crop was injured by blight or drought in some of the principal cotton-growing districts.

In the Nizam's Territory the area sown was large, but owing to an unfavourable season, the yield was bad.

1898-99

In the Panjab the rainfall at sowing time was scanty, in August it was irregular and deficient, but favourable showers in September did much to develop and mature the crop. Irrigation was also late and insufficient, and sowings on irrigated lands were in consequence greatly restricted.

In the United Provinces of Agra and Oudh the season was on the whole favourable, although there was excessive rain in parts. The dry weather in October benefited the crop.

In Bengal the season was unfavourable owing to the uneven character of the monsoon.

In the Central Provinces excessive rain at sowing time interrupted weeding operations in the northern districts, and in places insufficient rain caused defective germination. Drought followed in the autumn.

In Berar dry weather in October and the failure of the late rains had a bad effect, but the yield was good.

In Bombay the area under early cotton was increased in some places as a result of favourable rains and the rotation of crops, but that increase was almost counterbalanced by decreases in other places. The cultivation of cotton, especially in the Deccan and Karnatak, had not yet fully recovered from the check it received in 1897-98 by an unusually large sowing of food crops after the famine of 1896-97; and the late crop covered an area smaller than the average owing to unfavourable rains and to the substitution of other crops in place of cotton. The season was good until December, and though the crop afterwards suffered from cold and cloudy weather in Gujarat, adverse winds in the Karnatak, and frost in Sind, the yield was abundant.

In Madras, owing partly to the unfavourable season in the Deccan districts and partly to the low price of cotton, a reduced area was sown, and the yield was very small.

In the Nizam's Territory the monsoon was late at the commencement of the season, and though prospects were improved by rain in August and September, the yield was bad.

In Rajputana the season was on the whole unfavourable owing to insufficient rain; in Central India the crop did well.

1899-1900

In the Panjab the prospects of the crop were generally hopeful in the beginning of the season, and sufficient rain at sowing time and a good supply of canal water induced cultivators to sow an extensive area, a large proportion being on land irrigated by canals and wells. But with the holding off of rain in August and September the condition of the crop deteriorated, and the yield was poor.

In the United Provinces of Agra and Oudh excessive rain in June and July interfered with sowings and was also injurious to the young plant. Thereafter the absence of rain was even more injurious, especially in unirrigated tracts where the crop was almost entirely lost.

In Bengal in the early part of the season the rainfall was irregularly distributed, and later it was on the whole inadequate, and the yield of the crop, both early and late, was not good.

In the Central Provinces the season was one of very exceptional drought, and the plants suffered not only from want of rain but from abnormal and scorching heat.

In Berar the season was so unfavourable as to be little short of disastrous. The rainfall was deficient at the sowing season, and the subsequent drought in July prevented later sowings. The late rains also entirely failed, and with them the crop.

In Bombay the season was extremely unfavourable to the early crop, and though it was relieved here and there by partial showers in August and September, it completely failed in most places. The late sown crop also withered in many places and where it survived gave a very poor yield. In Sind the water supply was deficient and the yield poor.

In Madras the season was, on the whole, unfavourable and the yield very poor.

In the Nizam's Territory the monsoon, which promised to be favourable at the commencement of the season, failed in July and August. There was some rain in the beginning of September, but the continuance of the drought after the middle of September told heavily on the crop.

In Central India and Rajputana the conditions of the season resembled those of Bombay and Berar, and their effect on the cotton crop was quite as bad.

1900-01

In the Panjab the largest area yet reported was sown, about 75 per cent on irrigated land. But the crop suffered greatly in some districts from insects, and the heavy monsoon rains also retarded growth.

In the United Provinces of Agra and Oudh the monsoon commenced late, and though in June some thunderstorms gave heavy local falls in places, hot and dry weather continued until the beginning of July over the greater part of the provinces. The rain continued to be deficient and unevenly distributed until the last week of August when excellent rain was received throughout the provinces, and the fall in September was generally in excess of the average. Thereafter the weather continued generally favourable. A good yield in quantity and quality was the result.

In Bengal the rain in July was, on the whole, well distributed and fairly continuous. In August it was irregularly distributed and more or less in defect everywhere. Much more copious and general rain fell in September, but in October it was deficient in most places. The season was, on the whole, unfavourable to early cotton, though fairly favourable to the late cotton except at sowing time.

In the Central Provinces, in consequence of the relative cheapness of cotton seed, favourable conditions at sowing time, and good prices, a very extensive area was sown. The distribution of the rainfall left something to be desired. In some parts the plants were swamped by the heavy and continuous rain of August and September, especially in the richer soils and in low-lying positions. Heavy rain in September also injured the flowers and the absence of rain in October affected the crop in poor soils and high-lying fields, and owing to insufficient moisture the bolls withered before maturity.

In Berar the area under cotton was the largest known. The monsoon rainfall was better than for many years past. The early rains were somewhat deferred and sowings were later than usual, but the fall in June and July was normal; August was very wet and in September also the fall was excessive; but the rains closed abruptly at the end of that month. The cotton crop on poor soils suffered from lack of moisture, but on all rich black soils and in low-lying lands there was a heavy crop.

In Bombay early cotton in the Deccan and late cotton elsewhere, mainly in Gujarat, covered a restricted area, early rains being deficient and hot, allowing full sowings. The devotion of part of the usual cotton area to food-grains consequent on the scarcity of the preceding year also accounts for some of the decrease. The crop promised well at first, but afterwards it suffered from the deficiency of the late rains.

In Madras the north-east monsoon failed in some places and the area sown was also restricted by the preference given to the cultivation of food-grains. The crop was generally fair except in the Deccan districts, where *Northerns* and *Wetters* were affected by disease and want of rain.



**COTTON**  
**OILSEEDS**

In the Nizam's Territory with good rain at the sowing season for early cotton a large area was brought under cultivation, but late cotton did not receive sufficient rain; and in the Aurangabad division, which has the largest cotton area in the territory, the sudden cessation of the winter rains kept the crop back.

In Central India both area and yield were much in excess of the average.

In Burma heavy rains greatly injured the crop.

**1901-02**

In the Panjab the rainfall of May was beneficial to the crop, and the injurious effect of the long break in the rains in September and October was chiefly felt on unirrigated land. Some damage was also done by locusts, grasshoppers, and rats.

In the United Provinces of Agra and Oudh a very large area—the largest since 1894—was placed under cotton, although the rains were late, owing to the stimulus given by the high prices and the plentiful crop of the preceding year.

In Bengal the season was on the whole unfavourable by reason of deficient rain for the cotton crop, both early and late.

In the Central Provinces the germination of the crop, which was not sown under favourable conditions, was unequal, and a long break of the rains in the first half of July necessitated resowings to some extent in most of the important cotton-growing districts. Excessive rain in August did some injury which was not altogether made good by a timely break in the second half of September. Owing to the absence of rain after September, and the ravages of insects in October, the prospects of the crop materially deteriorated.

In Berar the monsoon rainfall was unusually heavy and continuous. It was not until the beginning of September that a break of any duration occurred and the crop then was suffering from excessive moisture; but three weeks of fine weather followed by timely showers brightened prospects considerably; and the clear cold weather of November and December brought the crop rapidly to maturity. Rats, however, caused much injury.

In Bombay there was some increase in the area sown with early and late cotton in the British districts of Gujarat and the Deccan, and in Baroda and other Gujarati States, owing to favourable early rains, but not enough to compensate for the large decline in Kathiawar and Cutch and in the Karnatak districts, which resulted from the deficiency of rain at the sowing season. In Sind there was a small increase due to a better water-supply. In Gujarat the season began well, but the crop made little progress owing to the failure of the late rains. Afterwards locusts and rats materially injured the surviving crops.

In Madras the condition and prospects of the crop were, on the whole, fair, and unusually late rain in the Deccan districts considerably improved prospects there. On the other hand, late and subsequently very heavy rain retarded sowings in the south; both the area and the yield were, on the whole, below the average.

In the Nizam's Territory the rains were on the whole favourable.

In Central India and Rajputana the crop was good.

In Burma the season was not favourable owing to want of rain.

**OILSEEDS**

*Linseed, rape, and mustard*

**1891-92**

In the Panjab the season was fairly good for oilseeds, and the area was the largest on record up to that year, but the yield disappointed expectation.

In the United Provinces of Agra and Oudh the season was mild and favourable to linseed, and rapeseed was free from fungoid disease: both crops, however, suffered to some extent from the lateness of the winter rains.

In Bengal the dryness of the season affected the crops, and reduced the areas considerably in most districts.

In the Central Provinces and Berar the season was on the whole favourable. In the former linseed suffered from the failure of the winter rains; while in the latter rain at sowing time was favourable, but the late rains were scanty.

In Bombay though a large area was sown with linseed in the north Deccan, the crop was everywhere poor owing to deficient rain, and in the Karnatak it was a complete failure from drought. The rapeseed crop in Gujarat and Sind was also injured by the dryness of the season, and the yield was very deficient.

**1892-93**

In the Panjab, where the oilseeds mature late, the winter rains were followed by a large increase in the area sown.

In the United Provinces of Agra and Oudh the expectations of a good crop were not realised owing to frost and wet weather in January and February.

In Bengal the rain in September and October was in defect, which was partially remedied by copious rain about the end of October and in November. The winter rains from January to March were excessive and continuous, and injured the crop.

In the Central Provinces timely rain in October led to a large expansion in the area under linseed, and although injury was caused by frost, the yield was good.

In Bombay the crop suffered from excess of moisture after heavy rain in September and October. But on the whole both linseed and rapeseed did well.

In Berar heavy rain in October retarded sowings of linseed, and hail in January blighted the crop.

In Assam the season was favourable:

In the Panjab the season, first favourable, changed for the worse when heavy rain in February and March injured the crop and generated insect pests. The crop was, however, on the whole fair.

In the United Provinces of Agra and Oudh the area sown with rape and linseed was seriously reduced by excessive rainfall, and the crops suffered from rust and insects following on continued wet in the spring.

In Bengal also sowings were impeded by excessive rain. The crop was afterwards seriously affected by the failure of the cold weather rains, and a wet March injured rape and mustard in many districts.

In the Central Provinces the crop promised well in the earlier months, but heavy rain, shortly after sowing, damaged the seedlings. Cloudy weather continued, rust set in, and much injury was done, but nevertheless the yield was much good.

In Bombay seasonable rain stimulated sowings of linseed, both area and yield being good. In Sind rapeseed suffered from insufficient water-supply, blight, and frost.

In Berar the sowing of linseed was late owing to heavy rain in October and November. The crop was much affected by untimely rain and rust.

In the Nizam's Territory excessive rain caused a contraction in places of the area sown, while in others timely rainfall promoted sowings.

In Assam the season was favourable for mustard.

1893-94

In the Panjab the area sown was contracted owing to deficient rainfall at the time of sowing; and excessive rain injured the crop in the submontane districts.

In the United Provinces of Agra and Oudh the linseed and rapeseed crops were injured by excessive moisture and by fungoid disease.

In Bengal sowings were somewhat restricted owing to the prolonged monsoon rain, and the crop was injured by the absence of rain from November until the middle of January.

In the Central Provinces untimely rain and cloudy weather throughout the winter caused damage to the crop. Insects attacked it, rust set in, and the crop was practically ruined.

In Bombay excessive moisture affected the area sown with linseed, and blight injured the crop. In Sind an extended area was sown with rapeseed owing to favourable floods; but the yield was not proportionate to the increase in the area.

In Berar the unusual prevalence of cloudy weather, and afterwards storms and winds, deteriorated the linseed crop. Rust set in, and the yield was poor.

In the Nizam's Territory the winter rains injured the crop.

The area under mustard in Assam was small and the yield inferior, owing to the unfavourable character of the season.

1894-95

The season generally, in the provinces in which linseed, rapeseed, and mustard are largely grown, was marked by scanty monsoon rains, which ceased much earlier than usual, and by an almost entire failure of the winter rains. The conditions, which were very unfavourable for wheat, were less so for the oilseeds in Bengal, Bombay, Berar, and Hyderabad, but were quite as bad in the Panjab, Sind, the United Provinces of Agra and Oudh, and the Central Provinces.

1895-96

The yield of linseed was much below the average, though larger than that of 1894-95 when the harvest was injuriously affected by prolonged wet. The area sown was restricted in Northern India by the dryness of the soil; but this dryness led to an expansion in the sowing of linseed in Bombay and Berar, much land considered too dry for wheat having been placed under linseed.

The area under rapeseed, on the other hand, was more or less contracted everywhere except in the Nizam's Territory, and the contraction was very material in the Panjab, the United Provinces of Agra and Oudh, Bombay, and Sind. The harvest, however, was good on the reduced area in the United Provinces, and in Bengal it was not much below the average; so that although the yield was very poor in the Panjab, Sind, and Bombay, the general result was a good crop.

In Assam the season was somewhat more favourable than in 1894-95 in the lower districts, but in Upper Assam it suffered much from want of rain.

The monsoon suddenly withdrew in the middle of August, and the drought which followed prevented extensive sowings. In Northern India the winter rains were timely and sufficient

1896-97

OILSEEDS

and of great benefit, but they, like the monsoon rains, failed in Central and Western India where the crops suffered severely.

The area sown with linseed was greatly contracted in the United Provinces of Agra and Oudh, the Central Provinces, Bombay, and Berar owing to want of moisture in the soil at sowing time. The yield was also bad especially in the Central Provinces and Berar, while in Bombay the crop almost entirely failed. In Bengal and the United Provinces of Agra and Oudh the crop was better, having been greatly benefited by the winter rains.

The area under rape and mustard was larger than in 1895-96 in the Panjab, Bombay, and Sind, but was somewhat restricted in Bengal and the United Provinces. The harvest, was generally fair. The short rainfall in Assam was unfavourable for sowing mustard and the yield was affected by the absence of rain during the period of growth.

**1897-98**

Conditions in the Panjab, the United Provinces, and Bengal were favourable at sowing, and although the area sown was restricted, except in the Panjab where the acreage under rapeseed was increased, the yield was good.

The conditions in Central and Western India were generally not favourable and the area sown was greatly contracted, and the yield deficient in proportion. The rapeseed crop, however, did better in Bombay and Sind.

The mustard crop in Bengal and Assam was reduced in consequence of retarded sowings and deficient winter rains.

**1898-99**

In the Panjab the season was very unfavourable for rapeseed, insufficient rain at sowing time and drought when the crop was maturing doing great damage.

In the United Provinces of Agra and Oudh excessive moisture at sowing time and the substitution of food-grains for other crops, led to a contraction in the area under linseed and rapeseed. The winter rain, however, was seasonable, and though rapeseed was injured by frost in places, both crops on the whole did fairly well.

In Bengal the conditions of the season were generally favourable, the moisture in the soil from the autumn rain, and the silt in many places from the early subsidence of the floods in September, being beneficial to the crop.

In Assam the sowing of mustard was restricted owing to the late subsidence of the floods, and the yield was very small.

In the Central Provinces the young plants on the lighter soils and on slopes withered in the drought and heat of November and December; and injury was caused by frost and cloudy weather on low-lying lands in some of the northern districts.

In Bombay sowings of linseed were restricted, owing partly to the cultivation of other crops and partly to the unfavourable character of the season. In Khandesh the rain at sowing time was seasonable and sufficient, and in Dharwar it was excessive; but elsewhere in the Deccan and the Karnatak the late rains were insufficient and the crop suffered. It was also injured in places by wind and insects. Sowings of rapeseed were restricted in Native Gujarat (except in Baroda) in consequence of insufficient rain, but in the British districts sufficient moisture in the soil and favourable winter rains stimulated larger sowings.

In Sind, as the result of a low inundation, there was a very great contraction in the area under rapeseed. The crop was also injured by frost in some places.

In Berar the monsoon was favourable and sowings were conducted under seasonable conditions; but the crop suffered from the failure of the late rains.

**1899-1900**

In the Panjab the early cessation of the monsoon, the dry autumn months, and the lateness and deficiency of the winter rains, had the natural result of diminished sowings and restricted yield of rapeseed. In some places no yield at all was obtained, the crop having been cut when green and eaten as a vegetable by the people or given as fodder to the cattle.

In the United Provinces of Agra and Oudh excessive rain in June and July was followed by a material deficiency in August and September, and the three following months were exceptionally dry; fortunately rain fell about the middle of January and did much good to both linseed and rapeseed.

In Bengal the season was not favourable to the cultivation of oilseeds. The rainfall in the autumn months was in defect, and the want of rain was felt in many districts at the time of sowing, while an excess in others interfered with the proper germination of the seeds. The usefulness of the rain which fell in January was qualified by the injury done in some places by hail.

In Assam the late subsidence of the floods, combined with the late cessation of the rains, interfered with timely sowings, but the yield was good owing to favourable weather after the crop was sown.

In the Central Provinces, the want of moisture in the soil at sowing time, and the absence of the winter rains, told upon linseed seriously. Germination was exceedingly defective, and the plants which came up yielded but little seed.

In Bombay linseed was a complete failure in Gujarat, no sowings being possible in consequence of the failure of the rains. In the Deccan and other parts of the Presidency, the conditions were hardly better. The rapeseed crop was also practically a complete failure, some return having been obtained only in Cutch.

In Berar also linseed was a disastrous failure. Even the best black soil failed to retain enough moisture to nourish the crop, and the plants withered before reaching maturity.

In the Nizam's Territory, which is subject to climatic conditions resembling those of Berar and Bombay, linseed, rapeseed, and mustard all did very badly.

## OILSEEDS

1900-01

In the Panjab the season was most favourable for rapeseed. The monsoon rains were abundant and the winter rains fell at opportune intervals, both for sowing and maturing. The area under the seed was more than double the average, and the yield very large.

In the United Provinces of Agra and Oudh the rainfall of the monsoon was abnormally heavy towards the end of the season, and the winter rains were also excessive and prolonged. The moisture in the soil was ample at the sowing season, and consequently the area sown was extended. But though the moisture permitted of the sowing of seed in a fairly large way, the excessive and prolonged continuance of the rain and cloudy weather generated fungoid diseases, and the crop was seriously affected by them in many districts, the yield in the localities affected being hardly more than half the normal crop.

In Bengal the monsoon rains were fitful and irregular, falling in abnormal quantity towards the end of the season, while the winter rain in January and February was also much in excess of the normal. On the whole the season was unfavourable to the oilseed crops, which suffered from an excess of rain in many districts and from comparative drought in others.

In Assam the mustard crop suffered in most districts from the absence of rain during the period of growth.

In the Central Provinces the continuous rain during August and September interfered with the preparation of land, whilst the absence of the usual October showers was unfavourable to sowings in some districts. Germination was generally good, and except in Nagpur, prospects were favourable until the continued cloud and rain in January and February induced rust which caused great injury. The unfavourable conditions after January told seriously upon linseed.

In Bombay linseed is mostly grown in the Deccan and Karnatak, and in both tracts the crop suffered so greatly from the absence of moisture owing to scanty rain as to be an almost complete failure. Rapeseed did better in Gujarat, but this crop is of much more importance in Sind, where the area sown was in excess of the average and a fair yield was expected.

In Berar the area sown with linseed was far below the average. After the year of famine during which both food-stocks and credit were exhausted, the general inclination of the cultivators was to obtain as early a crop as possible, and larger areas were devoted to the autumn crops, notably jawar and cotton. The monsoon rainfall was in excess of the average, but the ground had been so thoroughly parched by the failure of the rains of 1899 that the moisture was rapidly absorbed and was inadequate for the successful growth of linseed. No rain fell after sowings had been completed, the rain of January came too late to be of any material benefit, and the yield was poor.

In the Nizam's Territory an extensive area, not materially smaller than the average, was placed under linseed, but the conditions of the season were unfavourable, as in Berar.

1901-02

In the Panjab the rainfall of the monsoon of 1901 ceased early and was not as abundant as usual. The winter rains failed entirely, and high winds and severe frosts in February proved detrimental to the crop, which was only saved from destruction in some places by slight showers in the second half of March. The absence of rain throughout the season was more unfavourable for oilseeds than for wheat as the former are harvested earlier, and they did not therefore derive any benefit from the rains in the latter part of March. Owing to the absence of rain in the sowing season, a very small area was sown with oilseeds, while sources of artificial irrigation were devoted chiefly to superior crops. Rape was in some fields sown with wheat, and the contraction of wheat sowings affected this crop also. The crop on unirrigated lands gave extremely poor results generally and failed entirely in several localities. On irrigated lands also the crop was below the average.

In the North West Frontier Province, as in the Panjab, the season was most unfavourable for rapeseed. There was a decline in the area sown owing to the failure of the winter rains and to the short supply of irrigation from canals and hill torrents.

In the United Provinces of Agra and Oudh the autumn rains in the latter half of the season were insufficient in the Meorut division, and in parts of the Agra and Rohilkhand divisions; in the rest of the provinces conditions at seed-time were less unfavourable. The winter rains were scanty, only light rain having fallen towards the close of December and the beginning of January. Linseed is generally sown after an autumn crop, and, as the soil was too dry for sowing without previous irrigation, the area sown with this seed declined largely; but the area and yield of rapeseed were larger than the average.

In Bengal the monsoon was weak, the deficiency being serious in the Bihar and Chota Nagpur divisions. On the whole, the season was unfavourable for oilseeds, especially in Bihar; and there was a decline in the area sown owing to drought in the sowing season.

In Assam the season was favourable for the mustard crop except for heavy rain at the end of November. The area sown was larger than usual, and the yield was almost equal to the average.

**OILSEEDS**

In the Central Provinces the absence of moisture in the soil at the sowing season and the failure of the winter rains told seriously upon the linseed crop. Germination was defective and the plants which came up yielded but little seed.

In Bombay the absence of moisture severely injured the linseed crop, and its ruin was completed by rats, which destroyed nine-tenths of the crop in Khandesh. As regards rapeseed, the conditions in Sind where the crop is mostly grown were fairly good, but in Gujarat the crop was almost a complete failure by reason of drought and the destructive notivity of rats.

In Berar there was no winter rain, but the season was favourable for sowing and in most localities the seed germinated freely and prospects were good; but considerable injury was done by rats, and these prospects were not realised.

In the Nizam's Territory the area was slightly smaller than the preceding year, but a little larger than the average. The yield was smaller than the average owing to the unfavourable character of the latter part of the monsoon.

*Sesamum (til or jinjili)*

1891-92

In the Panjab the season was decidedly unfavourable, the late arrival of the monsoon, causing a reduction in the area sown. The crop was damaged by locusts, and the yield was very poor.

In the United Provinces of Agra and Oudh the monsoon rain was quite abnormal, light in the beginning, but excessive at the latter end of the season. The area and yield were both small.

In the Central Provinces the season was unfavourable and sowings were greatly restricted. The crop was very poor.

In Bombay the rain at sowing time was favourable, but the growing crop suffered from drought as well as from excess of moisture in places. In Sind a low inundation and locusts affected both area and yield.

In Berar excessive rain and insects injured the crop, though its condition was favourable in some districts owing to sufficient and seasonable rain.

In Madras the area and yield were reduced by the unfavourable character of the season.

1892-93

In the Panjab the spring was very dry and the summer rains late, but they were heavy at the end of July stimulating sowing. The yield was very good.

In the United Provinces of Agra and Oudh sowing was somewhat delayed by the late commencement of the monsoon, but light rain in July proved very favourable. Heavy rains in August did some injury, but the crop on the whole remained in good condition.

In the Central Provinces conditions were favourable except in tracts where excessive rain damaged the crop.

In Bombay there was timely rain, and extended sowings were made in the Deccan and Karnatak; prospects were affected by heavy rain late in the season, but the yield was better than in the preceding year. In Sind the harvest was bad.

In Berar unfavourable rain and the rotation of crops caused a decrease in the area sown. The crop promised well, but excessive rain at the close of the monsoon affected the yield seriously.

In Madras, owing to exceptionally favourable rainfall in February and March, extensive sowings were made and a fair yield was expected, but drought in some places, and exceptionally heavy rain in others, injured the growing crop.

1893-94

In the Panjab, though the season had very different effects in different districts, there was a general increase in the sown area; but the yield was small.

In the United and Central Provinces the weather was suitable for sowings, and the crops promised well at first, but excessive rain in the autumn caused injury, though less in the United than in the Central Provinces.

In Bombay there was a considerable decrease in the area sown, owing to untimely rain and an extension of cotton cultivation. Rain was excessive in September, and the yield was not good. In Sind, owing to the want of rain and the early subsidence of the river, the yield was not proportionate to the extended area sown.

In Berar the early sowings were impeded by deficient, and the later sowings by excessive, rainfall; and excess of rain in September injured prospects.

Heavy rain also interfered with sowing in the northern and north-eastern parts of Madras, but elsewhere in this province the season was favourable. The late crop was well up to the average in the central districts, but in the southern districts the absence of rain in January and February restricted the area. In no part of the province was the crop good.

In the Nizam's Territory the crop was damaged by excessive rain during the harvesting season.

In the Panjab suitable rains and previous high prices favoured extended sowings, but the premature cessation of the early rains combined with an excess in the later rains to reduce the yield.

In the United and Central Provinces the season began well, but injury was afterwards done by excessive rains, especially in the Central Provinces, where they not only damaged the crop in flower but also seriously impeded harvesting operations. In the United Provinces the loss occasioned by the rains was considerable.

In Bombay the early sowings were injured by rain, but the increased area sown later more than counterbalanced the loss. The yield was deficient owing mainly to scanty rain after sowing and to excessive rain when the crop was in flower. In Sind with favourable rain and an extensive inundation the yield was fairly good.

In Berar an extension of jawar sowings and the low prices obtained for sesamum in the previous year combined to reduce the area sown. Rain did much damage to the crop in flower, and the yield was generally poor.

In Madras heavy rains interfered with sowings of the early crop, especially in the Carnatic. The early cessation of the north-east monsoon rainfall restricted the area sown with the late crop, especially in the Carnatic and the southern districts. Owing to the continuance of unfavourable conditions the yield was very poor.

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In the Panjab the rainfall was unfavourable, and the crop on the whole was poor.

1895-96

In the United Provinces of Agra and Oudh the rains were timely and favourable for sowing, but they ceased in July, were moderate in August, and scanty in September and October. The crop did not develop fully, while insects and strong winds in some places did further damage. The yield did not come up to the expectations formed of it.

In the Central Provinces the season was generally favourable for sowing, and rainfall was well distributed to the end of August. This encouraged more extended sowings than usual, but the season became adverse later by reason of deficient rain and the abnormal heat which prevailed to the end of November.

In Bombay a large area was sown, the rainfall being seasonable, but the crops, both early and late, suffered from want of moisture. In Sind scanty rain and a low inundation curtailed the area, and the young crop suffered from want of moisture.

In Berar there was satisfactory rain at the time of sowing, but a long period of drought followed, and the yield was bad.

In Madras the early crop covered an area greater than the average owing to the favourable character of the early rain, and the late crop an area smaller than the average on account of the excessive sowing of the early crop. Rain was too heavy in some places while it was deficient in others, and the yield from both crops was bad.

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Everywhere except in Madras and Bombay an extended breadth of land was sown, but the early withdrawal of the monsoon after the middle of August proved as unfortunate for sesamum as for other crops.

1896-97

In the Panjab the crop was very poor.

In the United Provinces of Agra and Oudh the prospect of a fair season disappeared with the withdrawal of the monsoon in August, and the crop was greatly injured, especially in unirrigated lands.

In the Central Provinces the area sown was large, but the crop generally fared badly except in Nagpur; and the yield was more or less poor, though much larger than the average owing to the increasing favour with which the cultivators regarded the crop.

In Bombay, with the exception of Gujarat and Sind, the early withdrawal of the monsoon seriously injured the crop. In Gujarat the season was favourable and this oilseed took the place of damaged cotton. In Sind the inundation was good.

In Berar also a large area was placed under the crop owing to the promise at sowing time of a good season, but the drought which supervened injured the crop greatly.

In Madras the sowings of the early crop were greatly contracted owing to the want of seasonable rainfall, while those of the late crop were extended from timely rain. The former crop suffered severely from drought, and the result was a poor yield. The latter did not suffer so much.

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The late arrival of the south-west monsoon and the desire of the people to place greater breadths of land under food crops accounted for a contraction of the area sown in most provinces.

1897-98

The yield varied greatly from about an average crop in Bombay, the United Provinces, and the Panjab, to greatly below the average in Madras, Sind, and the Nizam's Territory.

In the Central Provinces and Berar the conditions were exceptionally favourable; the area sown was more than ordinarily large, and the yield was estimated at about double the average. These large yields so far balanced the less favourable results in other provinces that the aggregate yield for all the reporting provinces was well in excess of the average.



## OILSEEDS

1898-99

In the Panjab the area sown was a little larger than the average, but the cessation of the rain when the crop was ripening was followed by a poor yield.

In the United Provinces of Agra and Oudh the area sown was restricted, and excessive rain towards the latter part of the season deteriorated prospects.

In the Central Provinces the season was unfavourable, owing to the uneven distribution of the rainfall. The early sown crop suffered from excessive rain, and from the sudden withdrawal of the monsoon which left insufficient moisture in the soil and interfered with the development of the plants. The germination of the late sown crop was very defective, owing chiefly to excessive rain at sowing time.

In Bombay the increase in the area sown in parts of Gujarat and north Deccan, due to favourable rains at sowing time, did not suffice to counterbalance the large decreases elsewhere, which were attributed to insufficient rain in the southern Deccan and Karnatak and to a low inundation in Sind. The season was generally favourable and the yield was large.

In Berar sowings were made under favourable seasonal conditions, and, though the crop was injured by the failure of the late rains, the yield was large.

In Madras the season was favourable for the late crop, and it grew in good conditions on an extended area. But the area under the early crop, which occupies about three times the area sown with the late crop, yielded a poor crop.

1899-1900

In the Panjab the season opened very well, but became more unfavourable as the months passed, and the yield was small.

In the United Provinces of Agra and Oudh the excessive rainfall in the beginning of the season gave rise to apprehensions regarding the prospects of the crop, and later the crop was damaged by continued drought in the Meerut, Agra, and Rohilkhand divisions, where, however, til is not extensively sown. In the tracts in which the cultivation of til is important, the moderate rainfall of August and September proved very beneficial and the yield there was good.

In Bengal on the whole the season was good enough, though the rains were irregular, excessive in some places and insufficient in others; and the yield was larger than the average.

In the Central Provinces the season favoured sowing operations, but it did not continue favourable, and the abnormal heat of November did much injury. The early crop was fairly successful, but the cold weather til in many places began to wither when on the point of maturity.

In Bombay the early rains were scanty and the later rains failed entirely. Owing to the extremely unfavourable nature of the season the crop withered away in many places and where it survived gave the poorest yield.

In Berar the crops withered under the drought and the excessive heat which followed.

In Madras the area sown was restricted, the south-west monsoon being unfavourable in most places, and the yield was not good.

In the Nizam's Territory the rains failed, and the crop withered under the drought which followed some good rain in September.

1900-01

In the Panjab the area sown was much below the average, heavy floods in some districts restricting sowings.

In the United Provinces of Agra and Oudh the monsoon began late and was generally scanty and unevenly distributed until the third week of August. Then and in September, excellent rain fell, and its distribution was all that could be desired, especially in Bundelkhand, where ordinarily four-fifths of the area under sesamum is grown. Except for heavy falls in Benares and Gorakhpur in the second week of October, the weather during that month and November was clear and seasonable.

In Bengal the monsoon rainfall was capricious and irregular, and, on the whole, the season was not favourable for oilseeds, which suffered from an excess of rain in many tracts, while in others they suffered from drought.

In the Central Provinces the conditions at the time of sowing, both of the early and late varieties, were generally favourable and a large area was sown. Sesamum is a cheap crop to sow, and it resists drought better than most crops. The difficulty of obtaining the relatively expensive seed of wheat and other spring crops stimulated its cultivation. The early crop suffered somewhat from the heavy rain at the close of August and during September. The germination of the late sown crop, which is more extensively grown in the south of the provinces, also was irregular, heavy rain just after sowing having washed away part of the seed. Drought during October and November, abnormal heat, and insects, following on cloudy weather, also injured the crop. In consequence the yield was smaller than the normal.

In Bombay the conditions were good in Káthiáwár at the time of sowing, and double the average area was sown, the increase there and in Gujarat more than making up for the contraction in other parts of the Presidency caused by the preference of cultivators for the cultivation of food-grains.

In Berar the rains at sowing-time and the monsoon rains were favourable, there was no prolonged break, and the crop developed well under congenial climatic conditions.

In Madras the conditions were not good, and though a large area was sown the crop was deficient.

In the Nizam's Territory a few seasonable showers in January, which were badly needed, improved prospects. OILSEEDS

JUTE

1901-02

In the Panjab (including the North-West Frontier Province) the rainfall at sowing time was unevenly distributed, being excessive in some districts and insufficient in others. The yield was below the average owing chiefly to the early cessation of the monsoon rains.

In the United Provinces of Agra and Oudh rain commenced late, about the 10th of July; the weather in August was favourable and the rainfall above the normal in most districts; a break of about three weeks ensued early in September; but at the end of the month heavy rain was received in the greater part of the province. The second and the last weeks of October were rainless, but in the first and third weeks some rain fell in parts of the dry western districts. The month of November was practically rainless. Sowings were late, the drought in September retarded growth, and deficient rain in October caused further injury.

In Bengal there was no rain in December and January, and all the *rabi* crops suffered severely in consequence. A very restricted area was sown owing to drought at sowing time.

In the Central Provinces the rainfall was very unfavourable. The early sown variety suffered, especially in the north, from excessive rain, the crop being washed out in places while weeding was retarded or altogether prevented. The conditions were still more unfavourable for the late sown crop, which is put down at the end of August or during the first week of September. Continuous rain at this time interfered with sowings and much of the seed sown was washed out by heavy showers. Germination was very defective and many fields were ploughed up and devoted to other crops. The contraction of area sown was greatest in the Nagpur country, where the crop entirely failed over large tracts. A prolonged break subsequently occurred during which the young plants that germinated languished from want of proper moisture, and some injury was also caused by insects.

In Bombay the increase in the area sown in parts of Gujarat and Karnatak, due to favourable rains for sowing, was not sufficient to counterbalance the large decrease elsewhere, resulting mainly from the scantiness of sowing rains in the Presidency and to a low inundation in Sind. In Gujarat the season was very unfavourable owing to the failure of the late rains, while rats and locusts did some injury in places, and in consequence the crop was estimated to give only half the average yield. In the north of the Deccan, too, the crop suffered to some extent from the same causes, while in Sind it was affected by a deficient water-supply.

In Berar the monsoon rains were heavier than usual and the crop suffered from excessive moisture; during July and August the rainfall was almost continuous, and weeding operations were rendered impossible. Rats and locusts also attacked and injured the crop.

In Madras in the Circars, the Deccan districts, and the west coast the sowings were about up to the average, but owing to the unfavourable season they were very deficient elsewhere, especially in the Carnatic.

In the Nizam's Territory the area was above but the yield below the average, the late rains having been unfavourable.

## JUTE

The rainfall when sowings were being made was excessive, and the area placed under the crop was smaller than in the preceding year. Germination and growth were also affected by excessive rainfall. Later, again, the want of rain was felt in several districts. 1891

Excessive rainfall injured the plant in some districts, but on the whole the season was good, and a larger area was sown under the stimulus of high prices. 1892

The area sown was nearly equal to that of 1892, but the crop was greatly injured in most districts by heavy and continuous rain in the middle of the season. 1893

Rain was abundant and well distributed to the end of May, and the area sown was about equal to that of 1893. In June rain was deficient in several districts, though normal or in moderate excess in parts. At the end of July there was general and heavy rain throughout north Bengal, and during the first half of August the fall was favourable in every district. 1894

The rainfall was in excess of the normal quantity in April and the first half of May, heavy in the second half of May in east Bengal, and less than the average in other parts. In the next two months it was deficient, and in the first half of August it continued deficient in. 1895



**JUTE  
INDIGO**

central and western Bengal, and was excessive in north Bengal and north Bihar. The area sown was almost the same as in the preceding year; but the yield was larger.

- 1896 Owing to scanty rain when sowings were made the area placed under the crop was a little smaller than in 1895. In May and the early part of June excessive rain interfered with growth and with weeding. In July and August it was deficient, still further impairing the prospects of the crop in most districts.
- 1897 On the whole the season was favourable, and there was enough water for steeping.
- 1898 The area sown was smaller than in 1897, owing partly to the unfavourable character of the season at sowing time and partly to the low prices of jute in 1897 and to high prices of food-grains.
- 1899 The weather, though seasonable in the beginning, became extremely unfavourable towards the end of the season.
- 1900 There was some deficiency of rain in March and April, which prejudicially affected sowings in a few places. In May and the first fortnight of June, the rainfall was also light, but good rain later greatly improved the prospects of the crop. In July there was heavy rain in most districts, but a partial drought followed in August which, combined with a want of flood-water from the rivers, hampered steeping operations in north and east Bengal, and in a few cases diminished the yield. Fair rains fell in the first half of September, but almost too late to have much effect on the yield.
- 1901 The rainfall in the earlier months of the year was almost uniformly unfavourable. In June there was heavy rain in almost all the important jute-growing districts; in July the rainfall was very irregular but not seriously deficient; the rainfall of August was again capricious, and was in considerable defect in some important jute-growing districts. There was heavy rain early in September, and thereafter it was fine and hot. On the whole, the weather was unfavourable up to the close of May, but it was exceptionally favourable afterwards.

**INDIGO**

- 1891-92 In Bengal the season was altogether disastrous in consequence of an unusual deficiency of rain, and although the weather was more favourable at the manufacturing season, the yield was hardly increased.  
In the United Provinces of Agra and Oudh the rains commenced very late and were heavy and continuous, causing a reduction in the area sown. The excessive drought in June and July seriously tried the crop, while the continued wet weather of August prevented the proper development of dye in the leaves.  
In the Panjab the late arrival of the rains, and the ravages of locusts in some places, reduced the area and the yield.  
In Madras the area and yield were seriously affected by an unfavourable season.
- 1892-93 In Bengal the season was unfavourable at sowing time owing to deficient rain in autumn and spring; conditions improved later with favourable rain, but excessive rain and cloudy weather during manufacture again operated injuriously. In Bihar the weather was favourable throughout, although in some parts very heavy rain and floods caused injury.  
In the United Provinces of Agra and Oudh the autumn rains were late, heavy, and continuous, and the plants suffered to some extent; but the yield of dye was much better than in the preceding year.  
In the Panjab a protracted drought in the early summer retarded sowings, and the area sown was very much reduced.  
In Madras the crop was on the whole good, and it would have been very good throughout but for the unfavourable character of the season in December.
- 1893-94 In Bengal the rainfall was favourable at sowing time, and a large area was sown, but heavy and incessant rain and floods caused great injury.  
In the United Provinces of Agra and Oudh a favourable season and a rise in the price of indigo at Calcutta led to an increase in the area sown: the seed germinated freely, and the early commencement of the rains greatly benefited the crop.

The rainfall was favourable in the Panjab, and the state of the canals generally satisfactory, the result being a large area sown and a good yield.

In Madras larger sowings were made owing mainly to timely rains.

INDIGO

In Bengal the season was on the whole somewhat late, but the weather was generally favourable. In Bihar the early part of the season was particularly good, but it was followed by a long period of drought which injured the produce in most districts in the early part of the manufacturing season.

1894-95

In the United Provinces of Agra and Oudh, although the seed germinated well and timely rain benefited the crop, it suffered from deficient rain in the second half of July and from heavy and continuous rain in August; but the average condition was not much below that of the preceding year.

In the Panjab the area sown was increased, and the crop was good.

In Madras the large area sown and the fair yield secured in the preceding year led to a further increase in cultivation; the yield was generally fair.

In western Bengal the rainfall on the whole was deficient and untimely; in northern and eastern Bengal and in Bihar it was favourable in most places.

1895-96

In the United Provinces of Agra and Oudh the crop suffered at first from want of rain in most districts, and then improved with moderate and favourable rainfall, except in the Upper Doab where it suffered from floods. On the whole, however, the condition of the crop was better than in the preceding year.

In the Panjab the crop was fair.

In Madras the season was favourable in Kistna and North Arcot where a large area was placed under indigo, but elsewhere sowings were restricted owing to the insufficient rain of the south-west monsoon. The yield generally was fair.

In Bengal, owing to the early cessation of the monsoon of 1895 and the scanty showers in the spring of 1896, moisture was generally deficient at sowing, the deficiency continuing in most districts with the result that the yield was below the average. In Bihar the first cuttings were generally poor, but the dry weather gave an extremely and unusually good second cutting which in many places in north Bihar more than compensated for the deficient first crop.

1896-97

In the United Provinces of Agra and Oudh germination was satisfactory and prospects very favourable until July, but the late rains were scanty and unevenly distributed. The crop suffered in consequence.

In the Panjab the rainfall was scanty, but the condition of the young crop was generally fair. Later in the season the continued deficiency of rain was felt severely, and the crop on unirrigated land dried up completely.

In Madras the season opened with favourable conditions, and an increased area was sown; but the rain thereafter was deficient and the yield small.

In Bengal the area sown was small, the contraction being due to insufficient rain at sowing time. The crop suffered greatly from the absence of seasonable rain in Bihar and north Bengal and from excessive rain in south Bengal.

1897-98

In the United Provinces of Agra and Oudh the season was not favourable; the growth of the plants was interfered with early in the season by excessive heat and insufficient rain, and the heavy rain of July and August flooded the low lands and greatly injured the indigo growing on them.

In the Panjab the crop is grown on irrigated lands only, and its condition was generally good.

In Madras the area sown was small, the contraction being due not so much to the deficiency of seasonable rain as to the replacement of indigo by food crops.

In Lower Bengal the season was generally unfavourable, but it was favourable in north Bihar.

1898-99

In the United Provinces of Agra and Oudh the season was not favourable. The crop started well, but a large proportion was lost through insufficient irrigation and injury by insects, and further serious injury was done by continuous heavy rain, especially in the Benares division.

In Madras and the Panjab also the season was on the whole unfavourable, but the contraction in the area sown was stated to be partly due to the low prices of 1897.

In Bengal the season in the beginning was not unfavourable, but the excessive rain which fell in June, July, and August was most injurious, and the crop was also injured in many districts by the floods which followed the excessive rain.

1899-1900

**INDIGO**  
**SUGARCANE**

In the United Provinces of Agra and Oudh the crop continued in good condition until the end of June, but excessive rain fell in July and seriously injured the plant everywhere, especially in the eastern districts. The rains then fell away and drought, particularly in Agra and Meerut, added to the injury done by heavy rain.

In the Panjab the crop suffered from the absence of rain and the stoppage of canal irrigation in Multan and Dera Ghazi Khan. In some unirrigated tracts it failed entirely.

In Madras also the season was generally unfavourable and the yield deficient.

1900-01

In Bengal sowings and the early growth of the crop were retarded by the scanty rain of April and May. Fairly good rain in June and July was followed by an interruption in August, but prospects were improved in Bihar by abundant rain in September, which, however, was accompanied by floods and consequent injury to the crop in Lower Bengal. In October sufficient rain fell, and the season generally was much better than that of 1899. The area, however, was restricted, owing to the substitution of other crops for indigo in north Bihar under the discouragement of the comparatively low level of prices during the preceding three seasons. The yield on the whole was good in the districts of north Bihar, but very poor in Lower Bengal where, however, the cultivation of indigo is now greatly restricted.

In the United Provinces of Agra and Oudh, unlike Bengal, the area sown increased, the increase being ascribed to the temporarily improved prices in the previous season. It may be that that improvement was an inducement to native growers of indigo, while it did not remove the discouragement to European planters. In the early months of the season prospects were good, but heavy rain in the Doab towards the end of the season reduced the yield.

In the Panjab the rains were late at sowing time, but the crop did well later when the rain came down abundantly.

In Madras the high prices of food-grains induced cultivators to restrict their sowings of indigo. The crop sown was very fair on the whole.

1901-02

In Bengal the season was on the whole unfavourable. During the early months of the year the rainfall was in slight defect but in May there was good and generally well distributed rain. The monsoon rains broke late and were deficient in June and July. There was little rain anywhere in October, and the showery weather at the end of November did not extend to north Bihar. Besides the unfavourable character of the season, the area was affected by the fall of prices resulting from the competition of synthetic indigo.

In the United Provinces of Agra and Oudh the reduction of area was proportionately much greater than in Bengal. The prospects of the crop, which had been affected by the late arrival of the monsoon, continued to be unsatisfactory until the end of August, but fine dry weather in September favoured manufacture.

In the Panjab a restricted area was sown owing to late inundation from canals in the south-western districts and the closing of factories consequent on the fall in prices. There was an insufficiency of rain and canal irrigation after the sowings, and some injury was done by locusts.

In Madras an extended area was sown in Nellore and Kistna owing to favourable weather for sowings, but almost everywhere else the cultivation of indigo continued to decline. The low prices realised, and the high prices of food-grains, are the principal reasons assigned for the decrease, but in the Carnatic, where the decrease was marked, the season was very unfavourable.

**SUGARCANE**

1899 1900

In Bengal the season was generally favourable to the crop at the beginning, but excessive rain in some parts, in August, September, and October, adversely affected prospects, while, in a few places, the crop was injured by the absence of reasonable rainfall and by insects.

In the United Provinces of Agra and Oudh the season was favourable until the autumn rains set in; but the excessive rainfall of June and July seriously injured it, and further injury was caused by the scanty rainfall of the succeeding months. Slight injury from insects was also reported from several districts.

In the Panjab the unfavourable weather conditions affected even the crop grown on irrigated lands, and cane grown on unirrigated land was practically a failure. The crop was stunted in growth and deficient in juice, while, owing to the great scarcity of fodder, the cane was used entirely or very largely in many districts as cattle-food.

In Madras the weather in many places was unfavourable, and some of the crop suffered from want of water, especially in the Circars.

In Bengal the rainfall to the end of July was generally in defect; in August it was badly distributed and more or less deficient; in September it was copious and general; there was very little in October, and in November and December practically none. On the whole, the monsoon conditions were not very favourable to the crop, which also, in a few districts, suffered to some extent from insect pests.

SUGARCANE

1900-01

In the United Provinces of Agra and Oudh the rains of February and March favoured sowings, and the crop germinated freely. Hot winds and afterwards insufficient rain in June and July retarded growth; but the crop was generally very healthy and promising. The rainfall was moderate in August but unusually heavy in September, and accompanied by high east winds. Floods also caused some local injury on low lands. On the whole the autumn rains greatly benefited the crop. November was rainless, but December and January were exceptionally wet; and cane-pressing was delayed in places by excessive rain.

In the Panjab the area under cane was slightly reduced, owing to dry weather at sowing time in April and May and to the fact that prices of food-grains were so high that it was more profitable to grow them than sugar on some lands. In Hoshiarpur, one of the chief cane-producing districts in the province, another reason assigned for the decline was the supersession of indigenous by imported sugar. In Sialkot it was said that a great number of cultivators emigrated with their cattle to other places owing to the dearth of food and scarcity of fodder in the previous year, and as most of the cane crop was used as fodder in the preceding year, the supply of seed was small and the price high. Although there was, on the whole, a decline in the area under cultivation, both irrigated and unirrigated, the season was far more favourable than the previous year.

In Madras early rains and an adequate supply in tanks led to increased sowings. The condition and yield of the crop were generally fair.

In Bengal, on the whole, the season was not unfavourable, but rain was very scanty in February, March, and April, and the crop suffered from locusts and insects in a few districts. In December and January again there was a complete absence of rain. The area sown was below the normal owing to the unfavourable character of the early part of the season.

1901-02

In the United Provinces of Agra and Oudh the rains of January and February 1901 were ample and germination was good, and the supply of water in the hot months was generally sufficient except in a few districts. Injury to the crop in several districts resulted from various causes—hot winds, insects, and the late arrival of the monsoon; but it was serious only in the Rohilkhand division and in parts of the Meerut division where the crop was attacked by grasshoppers. The autumn rain in July, though below the normal, was well distributed, and the rain in August was favourable and prospects improved materially, though the injury caused in the tracts mentioned could not altogether be made good. A break of about three weeks ensued early in September and the crop began to suffer, but at the end of the month heavy rain was received in the greater part of the province except the Meerut division, which practically got no rain, while the falls in parts of the Agra and Rohilkhand divisions were insufficient. Some rain fell in places in October, but November and the greater part of December were rainless. The season was too dry to give a full yield of juice. In the two important cane-growing divisions of Meerut and Rohilkhand the crop was unpromising from the beginning owing to the injury caused by grasshoppers, and the drought of September and October further affected growth. In the other divisions the yield was somewhat better.

In the Panjab the area under sugarcane increased in irrigated tracts, but elsewhere there was a contraction due to scanty rain in March and April. The crop suffered from insects, locusts, and rats, and seriously from drought in September and October and the severe frost that followed. The result was so bad that in parts of Gujranwala the juice was not extracted and the cane was given as fodder to the cattle. The crop on the whole was below the average and, compared with the area, the estimated yield was disproportionately small. Another reason assigned for the decline was the supersession of indigenous by foreign sugar.

In the North-Western Frontier Province the crop was on the whole above the average. Though the failure of rain at the time of its maturing caused some decrease in the yield, the decline was more than compensated by the increased acreage.

In Madras, on the whole, a full normal area was planted. Rainfall was deficient in some places; but the yield was on the whole fair, though in the Circars the crop was far from good and in the Godavari delta disease caused material loss.

## TABLES OF AREA AND YIELD

## SUMMARY TABLE OF PRODUCTION IN

				1891-92	1892-93	1893-94	1894-95	1895-96
Rice	acres	.	.	40,539,031	48,358,707	49,525,300	50,002,241	49,396,747
	cwt	.	.	314,804,161	420,282,625	459,119,400	497,901,780	415,355,100
Wheat	acres	.	.	27,033,172	27,653,624	28,727,032	28,536,734	24,178,567
	tons	.	.	6,442,760	7,535,846	7,194,514	6,795,201	5,332,361
Cotton	acres	.	.	11,730,000	13,232,850	15,471,183	15,197,240	14,751,930
	bales	.	.	1,497,000	1,923,504	2,180,499	1,957,251	2,364,319
Linseed	acres	.	.	7,255,000	7,833,700	8,862,100	7,951,118	6,882,037
	tons	.	.	487,000	583,900	624,500	325,697	369,869
Rape and mustard	acres	.	.	10,258,000	12,263,000	12,585,100	12,691,333	10,492,476
	tons	.	.	535,000	989,300	786,200	737,081	822,043
Sesamum	acres	.	.	2,037,000	2,106,800	2,198,040	3,000,969	3,171,472
	tons	.	.	138,000	199,188	176,599	253,937	249,866
Jute	acres	.	.	...	2,135,142	2,223,600	2,261,300	2,242,700
	bales	.	.	...	5,717,444	5,001,700	6,144,300	6,425,900
Indigo	acres	.	.	...	1,218,766	1,552,008	1,688,042	1,414,002
	cwt	.	.	...	179,056	179,437	237,494	190,924
Earthnut	acres	.	.	...	...	...	...	216,200
	tons	.	.	...	...	...	...	...
Sugarcane	acres	.	.	...	...	...	...	...
	tons	.	.	...	...	...	...	...

Note.—For detailed figures of the area and yield in each province and State see the following pages

## EACH YEAR FROM 1891-92 TO 1901-02

1896-97	1897-98	1898-99	1899-1900	1900-01	1901-02		
48,021,162	52,205,466	52,682,060	51,669,635	48,632,403	49,020,326	acres	Rice
273,576,100	498,350,700	505,610,600	451,553,400	413,606,700	395,329,247	cwt	
20,050,390	24,026,195	25,453,107	18,768,279	24,284,053	23,350,581	acres	Wheat
5,355,879	7,194,943	6,803,501	6,357,430	7,157,597	6,009,016	tons	
14,065,650	14,243,772	14,621,000	11,873,612	14,584,523	14,232,135	acres	Cotton
1,020,191	2,107,933	2,421,613	812,075	2,303,936	1,069,238	bales	
4,918,892	6,142,367	6,469,387	5,014,406	5,026,091	6,299,326	acres	Linseed
220,083	445,070	427,891	295,684	326,024	342,624	tons	
9,095,201	12,202,659	11,658,432	10,862,821	12,568,600	11,382,886	acres	Rape and mustard
782,416	1,119,258	978,631	873,417	1,031,370	901,923	tons	
3,360,198	3,663,109	3,523,825	3,313,007	4,052,191	3,513,296	acres	Sesamum
217,053	310,817	304,018	186,729	332,862	229,952	tons	
2,190,600	2,151,600	1,624,400	1,961,800	2,093,400	2,210,000	acres	Jute
5,032,000	6,189,200	4,115,506	5,000,000	6,400,000	6,500,000	bales	
1,808,901	1,339,099	1,010,318	1,026,900	990,375	803,697	acres	Indigo
169,673	166,812	189,320	111,860	148,029	121,475	cwt	
273,520	208,903	217,814	178,946	204,408	423,443	acres	Earthnut
...	55,962	70,501	9,250	28,631	37,777	tons	
...	...	2,502,381	2,503,570	2,425,156	2,157,429	acres	Sugarcane
...	...	2,076,234	1,852,801	2,451,004	2,378,469	tons	

## RICE

PROVINCE	acres	cwt	PROVINCE	acres	cwt
<i>Bengal</i>			<i>Burma</i>		
1891-92 . . . .	39,552,008	281,801,161	1891-92 . . . .	4,215,023	(a)
1892-93 . . . .	37,824,907	333,956,225	1892-93 . . . .	4,025,600	50,346,000
1893-94 . . . .	37,886,500	374,227,800	1893-94 . . . .	4,928,000	47,874,000
1894-95 . . . .	38,639,500	416,857,200	1894-95 . . . .	4,793,341	45,381,980
1895-96 . . . .	37,447,600	317,514,600	1895-96 . . . .	5,068,147	41,481,000
1896-97 . . . .	36,177,400	179,637,400	1896-97 . . . .	5,224,002	47,079,000
1897-98 . . . .	39,549,500	393,142,000	1897-98 . . . .	5,720,766	52,217,000
1898-99 . . . .	39,605,400	405,842,900	1898-99 . . . .	5,910,650	44,851,000
1899-1900 . . . .	39,490,500	357,956,380	1899-1900 . . . .	6,050,135	54,160,000
1900-01 . . . .	36,013,800	311,503,600	1900-01 . . . .	6,326,993	52,975,000
1901-02 . . . .	36,366,500	280,303,400	1901-02 . . . .	6,597,126	58,438,147
<i>Madras</i>			<i>Total</i>		
1891-92 . . . .	5,771,000	30,000,200	1891-92 . . . .	49,599,031	314,801,161
1892-93 . . . .	6,403,200	35,980,400	1892-93 . . . .	48,358,707	420,282,025
1893-94 . . . .	6,710,200	37,017,600	1893-94 . . . .	49,525,800	459,119,400
1894-95 . . . .	6,569,400	35,662,600	1894-95 . . . .	50,002,241	497,901,780
1895-96 . . . .	6,881,000	56,359,500	1895-96 . . . .	49,396,747	415,355,100
1896-97 . . . .	6,620,000	48,359,700	1896-97 . . . .	49,021,462	275,676,100
1897-98 . . . .	6,935,200	47,991,700	1897-98 . . . .	52,205,468	498,350,700
1898-99 . . . .	7,166,000	54,916,700	1898-99 . . . .	52,682,050	505,640,800
1899-1900 . . . .	6,429,000	39,437,100	1899-1900 . . . .	51,969,636	451,553,460
1900-01 . . . .	6,591,600	49,023,100	1900-01 . . . .	48,932,493	413,506,700
1901-02 . . . .	6,716,700	50,597,700	1901-02 . . . .	49,620,326	395,329,247

## WHEAT

PROVINCE	acres	tons	PROVINCE	acres	tons
<i>Panjab (including N.-W. Frontier Province)</i>			<i>Bengal</i>		
1891-92 . . . .	6,224,000	1,420,000	1891-92 . . . .	1,300,000	250,000
1892-93 . . . .	7,020,000	2,213,000	1892-93 . . . .	1,559,000	486,000
1893-94 . . . .	8,265,000	2,500,000	1893-94 . . . .	1,461,000	459,000
1894-95 . . . .	8,051,800	2,305,353	1894-95 . . . .	1,413,000	686,300
1895-96 . . . .	6,893,400	1,753,708	1895-96 . . . .	1,427,400	345,600
1896-97 . . . .	6,584,300	1,872,088	1896-97 . . . .	1,311,700	386,900
1897-98 . . . .	8,013,800	2,358,975	1897-98 . . . .	1,599,500	592,000
1898-99 . . . .	7,729,200	1,977,777	1898-99 . . . .	1,582,500	656,400
1899-1900 . . . .	6,360,500	1,823,182	1899-1900 . . . .	1,550,300	572,700
1900-01 . . . .	9,080,000	3,028,580	1900-01 . . . .	1,498,700	472,500
1901-02 . . . .	8,023,600	2,005,579	1901-02 . . . .	1,388,200	391,000
<i>United Provinces of Agra and Oudh</i>			<i>Bombay (including Native States)</i>		
1891-92 . . . .	6,502,097	2,035,229	1891-92 . . . .	2,176,000	426,000
1892-93 . . . .	6,307,327	2,354,255	1892-93 . . . .	2,475,000	664,000
1893-94 . . . .	6,674,889	1,854,095	1893-94 . . . .	2,525,000	762,000
1894-95 . . . .	6,333,688	1,409,996	1894-95 . . . .	2,678,665	744,961
1895-96 . . . .	5,177,261	1,591,294	1895-96 . . . .	2,288,888	454,865
1896-97 . . . .	4,981,710	1,850,014	1896-97 . . . .	1,446,741	288,002
1897-98 . . . .	5,985,146	2,249,683	1897-98 . . . .	2,001,832	627,914
1898-99 . . . .	6,348,688	2,277,414	1898-99 . . . .	2,470,998	737,385
1899-1900 . . . .	6,202,826	2,410,032	1899-1900 . . . .	1,157,077	99,408
1900-01 . . . .	6,790,440	2,384,605	1900-01 . . . .	1,433,810	298,479
1901-02 . . . .	6,479,720	2,401,940	1901-02 . . . .	1,833,816	168,971
<i>Central Provinces</i>			<i>Berar</i>		
1891-92 . . . .	3,904,000	760,000	1891-92 . . . .	888,000	78,000
1892-93 . . . .	4,197,000	762,000	1892-93 . . . .	985,000	76,000
1893-94 . . . .	3,936,000	575,000	1893-94 . . . .	928,000	97,000
1894-95 . . . .	3,393,348	602,375	1894-95 . . . .	880,326	81,892
1895-96 . . . .	2,714,454	368,038	1895-96 . . . .	747,025	48,549
1896-97 . . . .	1,969,623	332,645	1896-97 . . . .	881,425	11,841
1897-98 . . . .	2,171,714	513,095	1897-98 . . . .	390,378	25,511
1898-99 . . . .	2,505,299	456,169	1898-99 . . . .	436,362	21,892
1899-1900 . . . .	1,483,070	201,803	1899-1900 . . . .	17,910	251
1900-01 . . . .	2,065,736	440,603	1900-01 . . . .	213,554	5,093
1901-02 . . . .	2,590,209	561,674	1901-02 . . . .	280,035	6,180

(a) Not stated

## WHEAT—continued

PROVINCE	acres	tons	PROVINCE	acres	tons
<i>Sind (including Native States)</i>			<i>Hyderabad</i>		
1891-92 . . . . .	483,000	117,000	1891-92 . . . . .	1,942,824	96,238
1892-93 . . . . .	604,000	201,000	1892-93 . . . . .	1,260,272	97,062
1893-94 . . . . .	581,000	161,000	1893-94 . . . . .	1,160,000	109,000
1894-95 . . . . .	673,251	215,361	1894-95 . . . . .	1,527,415	74,034
1895-96 . . . . .	315,559	71,683	1895-96 . . . . .	1,561,598	92,886
1896-97 . . . . .	406,752	116,470	1896-97 . . . . .	852,843	23,010
1897-98 . . . . .	591,621	177,160	1897-98 . . . . .	1,091,595	33,170
1898-99 . . . . .	369,706	81,231	1898-99 . . . . .	1,196,520	36,604
1899-1900 . . . . .	364,522	68,226	1899-1900 . . . . .	419,633	1,979
1900-01 . . . . .	479,487	123,160	1900-01 . . . . .	748,163	15,068
1901-02 . . . . .	495,618	102,182	1901-02 . . . . .	712,157	13,184
<i>Rajputana</i>			<i>Mysore</i>		
1891-92 . . . . .	1,471,000	362,000	1891-92 . . . . .	2,125	154
1892-93 . . . . .	1,601,000	431,000	1892-93 . . . . .	2,640	189
1893-94 . . . . .	1,646,000	389,000	1893-94 . . . . .	(b)	(b)
1894-95 . . . . .	1,529,146	368,168	1894-95 . . . . .	4,534	304
1895-96 . . . . .	1,306,868	315,573	1895-96 . . . . .	5,456	363
1896-97 . . . . .	1,374,346	223,982	1896-97 . . . . .	3,871	413
1897-98 . . . . .	1,302,238	307,082	1897-98 . . . . .	4,383	331
1898-99 . . . . .	1,196,014	276,388	1898-99 . . . . .	4,029	492
1899-1900 . . . . .	360,733	79,289	1899-1900 . . . . .	2,758	254
1900-01 . . . . .	713,290	170,682	1900-01 . . . . .	2,556	197
1901-02 . . . . .	541,834	163,869	1901-02 . . . . .	3,714	256
<i>Central India</i>			<i>Total</i>		
1891-92 . . . . .	2,040,126	598,189	1891-92 . . . . .	27,933,172	6,442,760
1892-93 (a) . . . . .	1,689,485	278,340	1892-93 . . . . .	27,653,034	7,535,846
1893-94 (a) . . . . .	1,537,143	227,819	1893-94 . . . . .	28,720,032	7,194,514
1894-95 . . . . .	2,042,531	390,567	1894-95 . . . . .	28,536,734	6,735,201
1895-96 . . . . .	1,740,608	290,745	1895-96 . . . . .	24,178,567	5,333,361
1896-97 . . . . .	1,366,269	179,949	1896-97 . . . . .	20,659,830	5,355,879
1897-98 . . . . .	1,501,013	279,492	1897-98 . . . . .	24,826,195	7,194,943
1898-99 . . . . .	1,613,851	287,749	1898-99 . . . . .	25,453,167	6,808,501
1899-1900 . . . . .	692,950	160,378	1899-1900 . . . . .	18,788,279	5,357,420
1900-01 . . . . .	1,238,317	218,224	1900-01 . . . . .	24,231,053	7,157,597
1901-02 . . . . .	1,451,633	254,331	1901-02 . . . . .	28,301,581	6,009,016

## COTTON

PROVINCE	acres	bales of 400 lb	PROVINCE	acres	bales of 400 lb
<i>Bombay (including Native States)</i>			<i>Madras</i>		
1891-92 . . . . .	5,136,000	683,000	1891-92 . . . . .	1,243,000	80,000
1892-93 . . . . .	5,286,400	946,400	1892-93 . . . . .	1,326,200	103,600
1893-94 . . . . .	5,910,900	927,100	1893-94 . . . . .	1,724,000	121,200
1894-95 . . . . .	5,292,717	782,497	1894-95 . . . . .	1,521,600	106,960
1895-96 . . . . .	5,803,593	915,575	1895-96 . . . . .	1,623,000	120,524
1896-97 . . . . .	5,033,349	723,687	1896-97 . . . . .	1,396,400	104,655
1897-98 . . . . .	4,751,103	834,001	1897-98 . . . . .	1,509,100	118,876
1898-99 . . . . .	5,098,145	1,101,039	1898-99 . . . . .	1,321,700	127,670
1899-1900 . . . . .	3,095,206	78,967	1899-1900 . . . . .	1,382,700	101,440
1900-01 . . . . .	4,240,140	672,278	1900-01 . . . . .	1,373,300	118,820
1901-02 . . . . .	3,819,729	443,596	1901-02 . . . . .	1,338,700	(c) 128,930
<i>Benar</i>			<i>Hyderabad</i>		
1891-92 . . . . .	2,244,000	302,000	1891-92 . . . . .	1,384,450	168,004
1892-93 . . . . .	2,186,600	186,800	1892-93 . . . . .	1,450,283	147,199
1893-94 . . . . .	2,184,800	162,500	1893-94 . . . . .	1,611,912	117,277
1894-95 . . . . .	2,102,956	116,280	1894-95 . . . . .	1,402,708	173,283
1895-96 . . . . .	2,071,856	285,268	1895-96 . . . . .	1,568,396	137,152
1896-97 . . . . .	2,306,870	137,823	1896-97 . . . . .	1,053,000	163,440
1897-98 . . . . .	2,150,320	185,965	1897-98 . . . . .	1,788,379	222,302
1898-99 . . . . .	2,476,308	177,513	1898-99 . . . . .	1,202,329	91,975
1899-1900 . . . . .	1,983,002	21,116	1899-1900 . . . . .	1,008,836	288,570
1900-01 . . . . .	2,521,651	215,178	1900-01 . . . . .	1,080,139	(a) 90,271
1901-02 . . . . .	2,060,211	245,302	1901-02 . . . . .		

(a) Incomplete

(b) No information

(c) Estimated yield, including zamindari tracts, 181,200 bales



**LINSEED**

(a) Exclusive of zamindari area in Raipur, Bilaspur, and Sambalpur  
(b) Exclusive of Tonk  
(c) Exclusive of the greater part of the Bhopal Agency

(d) "Pure" means seed sown by itself; "mixed" means seed sown in the same fields with other crops

(e) Rough estimates, the usual data not having been available

## LINSEED—continued

Province	acres	tons	Province	acres	tons
<i>Central Provinces</i>			<i>Bombay (including Native States)</i>		
1891-92 . . . . .	1,888,000	112,000	1891-92 . . . . .	270,000	19,000
1892-93 . . . . .	1,381,000	134,000	1892-93 . . . . .	288,000	25,000
1893-94 . . . . .	1,788,000	132,000	1893-94 . . . . .	402,000	52,000
1894-95 . . . . .	1,498,672	42,532	1894-95 . . . . .	410,692	25,808
1895-96 . . . . .	730,750	45,253	1895-96 . . . . .	606,428	68,261
1896-97 . . . . .	527,421	19,391	1896-97 . . . . .	157,793	2,221
1897-98 . . . . .	683,728	69,783	1897-98 . . . . .	223,396	23,646
1898-99 . . . . .	838,266	58,955	1898-99 . . . . .	277,462	23,975
1899-1900 . . . . .	806,953	4,319	1899-1900 . . . . .	137,356	428
1900-01 . . . . .	495,165	20,662	1900-01 . . . . .	141,221	8,036
1901-02 . . . . .	605,538	33,916	1901-02 . . . . .	170,982	3,614
<i>Hyderabad</i>			<i>Rest of India</i>		
1896-97 . . . . .	321,455	11,355	1891-02 . . . . .	567,000	114,000
1897-98 . . . . .	438,030	15,141	1892-93 . . . . .	567,000	114,000
1898-99 . . . . .	426,015	13,448	1893-94 . . . . .	567,000	114,000
1899-1900 . . . . .	171,070	1,506			
1900-01 . . . . .	371,988	8,771			
1901-02 . . . . .	370,876	9,899			
<i>Berar</i>			<i>Total</i>		
1891-92 . . . . .	864,000	35,000	1891-92 . . . . .	7,255,000	487,000
1892-93 . . . . .	854,000	21,000	1892-93 . . . . .	7,893,700	583,900
1893-94 . . . . .	578,000	29,000	1893-94 . . . . .	8,862,100	624,800
1894-95 . . . . .	385,563	13,898	1894-95 . . . . .	7,951,118	325,697
1895-96 . . . . .	500,650	27,497	1895-96 . . . . .	6,882,037	369,869
1896-97 . . . . .	188,142	4,576	1896-97 . . . . .	4,918,892	220,983
1897-98 . . . . .	180,472	10,405	1897-98 . . . . .	6,142,387	445,970
1898-99 . . . . .	171,095	7,683	1898-99 . . . . .	6,469,387	427,894
1899-1900 . . . . .	21,564	—	1899-1900 . . . . .	5,014,408	295,684
1900-01 . . . . .	164,716	5,892	1900-01 . . . . .	5,926,991	326,024
1901-02 . . . . .	185,788	9,606	1901-02 . . . . .	6,249,326	342,624

## RAPE AND MUSTARD

Province	acres	tons	Province	acres	tons
<i>Bengal</i>			<i>United Provinces of Agra and Oudh</i>		
1892-93 . . . . .	2,250,000	372,300	1891-92 (a) { pure	182,000	32,000
1893-94 . . . . .	2,200,100	331,200	{ mixed	9,083,000	360,000
1894-95 . . . . .	2,221,000	343,700	1892-93 { pure	126,000	27,000
1895-96 . . . . .	2,148,400	332,400	{ mixed	8,583,000	307,000
1896-97 . . . . .	2,003,900	312,300	1893-94 { pure	131,000	21,000
1897-98 . . . . .	2,239,700	438,000	{ mixed	8,009,000	240,000
1898-99 . . . . .	2,107,200	418,200	1894-95 { pure	109,347	16,497
1899-1900 . . . . .	2,032,900	371,900	{ mixed	9,109,152	216,050
1900-01 . . . . .	2,043,200	337,800	1895-96 { pure	95,678	26,551
1901-02 . . . . .	1,958,500	379,500	{ mixed	7,457,563	359,979
<i>Panjab (including N.-W. Frontier Province)</i>			1896-97 { pure	88,372	18,624
1891-92 . . . . .	594,000	68,000	{ mixed	7,084,519	340,002
1892-93 . . . . .	850,000	137,000	1897-98 { pure	88,822	28,417
1893-94 . . . . .	900,000	112,000	{ mixed	8,370,803	436,451
1894-95 . . . . .	802,600	97,221	1898-99 { pure	92,679	22,884
1895-96 . . . . .	476,100	50,603	{ mixed	8,548,414	410,983
1896-97 . . . . .	515,300	52,756	1899-1900 { pure	70,180	21,186
1897-98 . . . . .	1,112,500	142,115	{ mixed	8,109,056	425,471
1898-99 . . . . .	582,000	56,041	1900-01 { pure	94,130	24,060
1899-1900 . . . . .	397,600	26,761	{ mixed (b)	8,150,000	372,000
1900-01 . . . . .	1,099,700	260,167	1901-02 { pure	125,555	36,841
1901-02 . . . . .	789,500	75,091	{ mixed	8,267,814	410,617
			<i>Hyderabad</i>		
			1896-97 . . . . .	1,394	73
			1897-98 . . . . .	3,838	140
			1898-99 . . . . .	8,796	286
			1899-1900 . . . . .	905	6
			1900-01 . . . . .	16,597	296
			1901-02 . . . . .	12,077	203

(a) "Pure" means seed sown by itself; "mixed" means seed sown in the same fields with other crops.  
 (b) Rough estimates, the usual data not having been available.

## RAPE AND MUSTARD—continued

PROVINCE	acres	tons	PROVINCE	acres	tons
<i>Sind (including Native States)</i>			<i>Bombay (including Native States)</i>		
1891-92 . . . . .	169,000	22,000	1891-92 . . . . .	44,000	7,000
1892-93 . . . . .	140,000	20,000	1892-93 . . . . .	65,000	13,000
1893-94 . . . . .	111,000	17,000	1893-94 . . . . .	89,000	18,000
1894-95 . . . . .	222,413	21,852	1894-95 . . . . .	91,822	18,509
1895-96 . . . . .	53,664	8,503	1895-96 . . . . .	49,431	7,617
1896-97 . . . . .	72,093	11,101	1896-97 . . . . .	55,615	8,207
1897-98 . . . . .	154,248	27,277	1897-98 . . . . .	56,830	14,880
1898-99 . . . . .	70,766	8,601	1898-99 . . . . .	53,091	9,705
1899-1900 . . . . .	64,637	6,193	1899-1900 . . . . .	2,536	111
1900-01 . . . . .	119,596	12,301	1900-01 . . . . .	39,134	6,613
1901-02 . . . . .	106,360	11,030	1901-02 . . . . .	17,349	1,718
			<i>Rest of India</i>		
<i>Assam</i>			1891-92 . . . . .	68,000	10,000
1891-92 . . . . .	168,000	36,000	1892-93 . . . . .	68,000	10,000
1892-93 . . . . .	170,000	45,000	1893-94 . . . . .	68,000	10,000
1893-94 . . . . .	168,000	34,000	<i>Total</i>		
1894-95 . . . . .	184,390	20,240	1891-92 . . . . .	10,258,000	535,000
1895-96 . . . . .	182,640	36,386	1892-93 . . . . .	12,263,000	9,9300
1896-97 . . . . .	178,408	38,853	1893-94 . . . . .	12,685,100	786,200
1897-98 . . . . .	167,288	31,878	1894-95 . . . . .	12,691,393	737,081
1898-99 . . . . .	134,856	21,891	1895-96 . . . . .	10,492,476	822,043
1899-1900 . . . . .	119,110	21,789	1896-97 . . . . .	9,995,201	782,416
1900-01 . . . . .	120,309	21,140	1897-98 . . . . .	12,202,859	1,119,258
1901-02 . . . . .	167,671	31,044	1898-99 . . . . .	11,658,432	978,681
			1899-1900 . . . . .	10,862,821	873,417
			1900-01 . . . . .	12,588,666	1,034,370
			1901-02 . . . . .	11,382,866	961,923

## SESAMUM

PROVINCE	acres	tons	PROVINCE	acres	tons
<i>Madras</i>			<i>Bengal</i>		
1891-92 . . . . .	501,000	(a) 4,900	1891-92 . . . . .	356,200	43,365
1892-93 . . . . .	318,600	(a) 5,523	1892-93 . . . . .	368,900	35,939
1893-94 . . . . .	296,800	(a) 5,290	1893-94 . . . . .	332,500	30,765
1894-95 . . . . .	613,600	16,739	1894-95 . . . . .	367,500	49,800
1895-96 . . . . .	821,700	22,507	1895-96 . . . . .	360,470	51,100
1896-97 . . . . .	562,800	14,830	1896-97 . . . . .	335,200	49,973
1897-98 . . . . .	826,000	24,100	1897-98 . . . . .	395,700	45,406
1898-99 . . . . .	690,700	25,900	1901-02 . . . . .	385,200	51,160
1899-1900 . . . . .	665,900	19,800			
1900-01 . . . . .	850,000	23,200	<i>Panjab</i>		
1901-02 . . . . .	743,500	27,600	1891-92 . . . . .	122,000	15,000
<i>Bombay (including Native States)</i>			1892-93 . . . . .	204,500	25,900
1891-92 . . . . .	590,000	79,000	1893-94 . . . . .	331,800	25,900
1892-93 . . . . .	703,500	105,500	1894-95 . . . . .	319,200	31,917
1893-94 . . . . .	668,600	78,700	1895-96 . . . . .	189,400	18,772
1894-95 . . . . .	754,073	100,498	1896-97 . . . . .	223,400	21,379
1895-96 . . . . .	849,039	93,101	1897-98 . . . . .	195,400	22,984
1896-97 . . . . .	770,553	65,600	1898-99 . . . . .	252,600	25,350
1897-98 . . . . .	681,905	103,136	1899-1900 . . . . .	216,400	16,233
1898-99 . . . . .	754,327	115,566	1900-01 . . . . .	218,500	19,077
1899-1900 . . . . .	303,143	6,186	1901-02 . . . . .	211,500	16,961
1900-01 . . . . .	719,642	105,167			
1901-02 . . . . .	628,827	50,844	<i>United Provinces of Agra and Oudh</i>		
<i>Central Provinces</i>			1891-92 . . . . .	142,000	8,000
1891-92 . . . . .	456,000	17,000	1892-93 . . . . .	152,600	14,700
1892-93 . . . . .	503,000	33,000	1893-94 . . . . .	200,600	19,700
1893-94 . . . . .	534,700	31,300	1894-95 . . . . .	177,013	16,513
1894-95 . . . . .	520,099	27,714	1895-96 . . . . .	148,833	14,551
1895-96 . . . . .	569,407	45,313	1896-97 . . . . .	177,785	12,239
1896-97 . . . . .	627,048	43,953	1897-98 . . . . .	147,817	14,994
1897-98 . . . . .	749,791	57,770	1898-99 . . . . .	155,178	15,159
1898-99 . . . . .	684,263	43,475	1899-1900 . . . . .	203,601	22,744
1899-1900 . . . . .	1,026,257	62,132	1900-01 . . . . .	235,151	28,481
1900-01 . . . . .	983,260	82,133	1901-02 . . . . .	241,242	23,326
1901-02 . . . . .	742,702	41,533			

(a) Incomplete

## SESAMUM—continued

PROVINCE	acres	tons	PROVINCE	acres	tons
<i>Sind (including Native States)</i>			<i>Hyderabad</i>		
1891-92	103,000	(a) 7,800			
1892-93	109,500	10,616			
1893-94	177,740	12,809			
1894-95	101,010	15,892	1896-97	337,011	13,005
1895-96	151,038	12,052	1897-98	404,020	13,200
1896-97	183,873	12,881	1898-99	426,740	14,163
1897-98	154,812	8,260	1899-1900	237,512	2,383
1898-99	114,129	8,285	1900-01	392,032	10,421
1899-1900	158,957	7,323	1901-02	377,023	10,011
1900-01	105,881	4,498			
1901-02	95,053	5,756			
			<i>Total</i>		
<i>Berar</i>			1891-92	2,037,000	138,000
1891-92	123,000	6,300	1892-93	2,106,800	199,138
1892-93	115,100	4,000	1893-94	2,198,010	176,599
1893-94	85,800	3,200	1894-95	3,000,909	253,987
1894-95	69,715	2,359	1895-96	3,171,472	249,866
1895-96	76,153	2,701	1896-97	3,369,198	217,653
1896-97	103,298	3,515	1897-98	3,662,109	310,817
1897-98	135,161	6,573	1898-99	3,523,825	304,918
1898-99	135,433	5,620	1899-1900	3,813,067	186,720
1899-1900	116,033	1,436	1900-01	4,052,191	332,862
1900-01	140,022	9,551	1901-02	3,513,296	229,952
1901-02	118,249	2,958			

## JUTE (in Bengal)

	acres	bales of 400 lb		acres	bales of 400 lb
1891	(b) 1,403,445	(b) 2,971,794	1896	2,196,600	5,032,000
1892	2,135,142	5,717,414	1897	2,151,600	6,169,200
1893	2,222,000	5,001,700	1898	1,621,400	4,115,500
1894	2,204,300	6,141,300	1899	1,991,800	5,000,000
1895	2,212,700	6,425,900	1900	2,093,400	6,400,000
			1901	2,249,000	6,510,000

## INDIGO

PROVINCE	acres	cwt	PROVINCE	acres	cwt
<i>Bengal</i>			<i>Madras—continued</i>		
1892-93	645,050	92,000	1896-97	454,700	60,749
1893-94	648,938	67,286	1897-98	323,900	61,460
1894-95	629,100	104,485	1898-99	210,600	30,320
1895-96	653,700	73,133	1899-1900	219,000	33,340
1896-97	682,200	56,071	1900-01	251,900	46,100
1897-98	629,500	50,415	1901-02	253,000	40,660
1898-99	512,100	74,321			
1899-1900	419,200	44,000	<i>Panjab</i>		
1900-01	360,600	47,707	1891-92	52,200	9,256
1901-02	318,200	47,000	1892-93	65,300	10,083
<i>United Provinces of Agra and Oudh</i>			1893-94	110,700	15,346
1891-92	201,369	20,533	1894-95	121,200	24,003
1892-93	206,516	26,515	1895-96	101,300	20,325
1893-94	319,980	38,106	1896-97	135,400	20,549
1894-95	429,242	41,521	1897-98	108,800	17,393
1895-96	342,102	33,788	1898-99	47,300	8,263
1896-97	430,601	40,713	1899-1900	67,300	15,577
1897-98	370,899	37,545	1900-01	115,701	32,693
1898-99	240,418	26,410	1901-02	71,600	14,818
1899-1900	231,400	17,977			
1900-01	202,175	31,523	<i>Total</i>		
1901-02	160,897	18,901	1891-92	419,599	143,329
<i>Madras</i>			1892-93	1,218,769	179,050
1891-92	166,130	18,540	1893-94	1,552,003	179,437
1892-93	301,000	50,420	1894-95	1,085,042	237,491
1893-94	442,400	53,100	1895-96	1,414,002	190,021
1894-95	514,500	67,430	1896-97	1,608,001	168,073
1895-96	414,000	63,680	1897-98	1,339,099	166,812
			1898-99	1,010,318	139,820
			1899-1900	1,036,000	111,800
			1900-01	990,375	143,020
			1901-02	803,697	121,475

(a) Incomplete

(b) Approximate

## EARTHNUT

PROVINCE	acres	tons		acres	tons
<i>Madras</i>			<i>Total</i>		
1895-96 . . .	216,200	(a)	1895-96 . . .	(c) 216,200	(a)
1896-97 . . .	124,800		1896-97 . . .	273,526	(a)
1897-98 . . .	83,600		1897-98 . . .	203,903	(d) 55,962
1898-99 . . .	116,200		1898-99 . . .	217,814	(d) 70,561
1899-1900 . . .	102,000		1899-1900 . . .	178,916	(d) 9,250
1900-01 . . .	229,097		1900-01 . . .	291,403	(d) 28,631
1901-02 . . .	362,135		1901-02 . . .	423,413	(d) 37,577
<i>Bombay (including Native States)</i>					
1896-97 . . .	148,726	(a)			
1897-98 . . .	120,303	(b) 55,962			
1898-99 . . .	101,614	70,561			
1899-1900 . . .	71,916	9,250			
1900-01 . . .	61,411	28,631			
1901-02 . . .	61,308	37,577			

## SUGARCANE

PROVINCE	acres	tons	PROVINCE	acres	tons
<i>Bengal</i>			<i>Madras</i>		
1898-99 . . .	861,100	871,435	1898-99 . . .	45,500	(a)
1899-1900 . . .	884,400	817,185	1899-1900 . . .	54,400	(a)
1900-01 . . .	801,803	811,420	1900-01 . . .	55,100	(a)
1901-02 . . .	811,700	857,155	1901-02 . . .	53,900	109,100
<i>United Provinces of Agra and Oudh</i>			<i>Total</i>		
1898-99 . . .	1,227,881	1,201,700	1898-99 . . .	2,502,381	(d) 2,076,331
1899-1900 . . .	1,259,070	838,885	1899-1900 . . .	2,569,570	(d) 1,852,801
1900-01 . . .	1,212,456	1,103,214	1900-01 . . .	2,425,156	(d) 2,151,604
1901-02 . . .	1,216,420	976,222	1901-02 . . .	2,457,420	2,378,469
<i>Punjab (including N. W. Frontier Province)</i>					
1898-99 . . .	367,900	(a)			
1899-1900 . . .	365,700	196,731			
1900-01 . . .	355,600	446,970			
1901-02 . . .	375,400	485,092			

(a) No information (b) Excluding Native States (c) Madras only (d) Incomplete

